

```

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natggaggaa aagtgaagaa gacttaggct ttagtcctcc atgacttttc ttaagcacta 360
cctacctgta ataagctgag tgcaaaagga tgccgaagaa aatctgcacc cagaagctgt 420
tagaaagcac tgcagangaa cagggnatga ataaaataaa nagntcttaa taaaccctta 480
agattctttg ntcaaggggn actttgccaa aaggggcaga atangngggn aaagagttgc 540
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ggntataatt aaaatgnggc tttttacact ggnggggcta tataaaaact gggtaghnnaa 660
atttccaccg agcatntatg gngatttgnt cacagnaaac ctccgggcng gaccacgct 720
aagggnggaa ttccagcnac antggggggg ncngntacct anagtggatc ccnagnctng 780
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<210> 1663

<211> 585

<212> DNA

<213> Homo sapiens

<400> 1663

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gatatctaca aggctaataa cattgcctat gaagatgtgg tcgggggaga agactggaac 180
ccagtagagg agaaaataga gagtcaaacc caggaagagg tgagagacag caaagagaat 240
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gcctatattg aaagggttagt aaatgctgca ggaagtggga gggttacagaa tgggcaaaat 420
ggggaaaggg ccaccaggct ttttgagaaa cctcttgatt ctcatgctat ttatcagacc 480
tcggccgcga ccacgctaag ggcgaattcc agcacactgg cggccgttac tagtggatcc 540
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<210> 1664

<211> 999

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 2, 5, 10, 22, 83, 150, 176, 189, 264, 275, 283, 286, 302, 311, 318, 338, 374, 524, 528, 531, 536, 541, 606, 611, 614, 616, 621, 634, 635, 636, 644, 659, 682, 688, 702, 715, 723, 726, 768, 777, 779, 789, 796, 802, 810, 819, 831, 836

<223> n = A,T,C or G

<221> misc_feature

<222> 853, 854, 869, 874, 893, 900, 903, 911, 989, 999

<223> n = A,T,C or G

<400> 1664

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aagtccaaaa ctactcacac gcatctcttn attgggggaaa agctgagact attatncatt 180
cttggtagnc ttgcaacctt gcatgaagag caccatttgc atttctttca tctttcagaa 240
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tnaaacccaa nactgtnttc attaaaaata attttggntt gtaacaaaat tatgaaatac 360
aatgcaagca cctnggtata gcattattac tgaaaccact taattcccag ctttttgagt 420
tttttaaaaa aaccactgc actaagattc acaattcatt gctacatata aattaaagct 480

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agtaagaaca cactaacgtc acaagtttct cattctaaag tgcnaaancc ntaatngtct 540
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tggaangtca ntantntttt naatccccaa aggnnnncatt tctnttttaa aaaattggnt 660
accttttgaa ctgggggtaaa gnaaaatnag gaacccttgg gnggtttttt ttatnttttc 720
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cacccttgng gaaacncttt tngtgggggn cccggtcgna aaaccaacc nccctntaaa 840
aaggggggggt cgnaaaaaaa tttctccna aganaaaccc acctttgggg cgnggggacn 900
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<210> 1665

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 1665

gctaaagggtg accccaagaa accaaag

27

<210> 1666

<211> 37

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 1666

ctattaactc gagggagaca gataaacagt ttcttta

37

<210> 1667

<211> 207

<212> PRT

<213> Homo sapiens

<400> 1667

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Met Gln His His His His His Ala Lys Gly Asp Pro Lys Lys Pro
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Lys Gly Lys Met Ser Ala Tyr Ala Phe Phe Val Gln Thr Cys Arg Glu
          20          25          30
Glu His Lys Lys Lys Asn Pro Glu Val Pro Val Asn Phe Ala Glu Phe
          35          40          45
Ser Lys Lys Cys Ser Glu Arg Trp Lys Thr Met Ser Gly Lys Glu Lys
          50          55          60
Ser Lys Phe Asp Glu Met Ala Lys Ala Asp Lys Val Arg Tyr Asp Arg
65          70          75          80
Glu Met Lys Asp Tyr Gly Pro Ala Lys Gly Gly Lys Lys Lys Lys Asp
          85          90          95
Pro Asn Ala Pro Lys Arg Pro Pro Ser Gly Phe Phe Leu Phe Cys Ser
          100          105          110
Glu Phe Arg Pro Lys Ile Lys Ser Thr Asn Pro Gly Ile Ser Ile Gly
          115          120          125

```

Asp	Val	Ala	Lys	Lys	Leu	Gly	Glu	Met	Trp	Asn	Asn	Leu	Asn	Asp	Ser
130						135					140				
Glu	Lys	Gln	Pro	Tyr	Ile	Thr	Lys	Ala	Ala	Lys	Leu	Lys	Glu	Lys	Tyr
145					150					155					160
Glu	Lys	Asp	Val	Ala	Asp	Tyr	Lys	Ser	Lys	Gly	Lys	Phe	Asp	Gly	Ala
				165					170					175	
Lys	Gly	Pro	Ala	Lys	Val	Ala	Arg	Lys	Lys	Val	Glu	Glu	Glu	Asp	Glu
			180					185					190		
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Glu	
	195						200					205			

<210> 1668

<211> 636

<212> DNA

<213> Homo sapiens

<400> 1668

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cgggaaatga	aggattatgg	accagctaag	ggaggcaaga	agaagaagga	tcctaattgct	300
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tccacaaacc	ccggcatctc	tattggagac	gtggcaaaaa	agctgggtga	gatgtggaat	420
aattttaaag	acagtgaaaa	gcagccttac	atcactaagg	cggcaaagct	gaaggagaag	480
tatgagaagg	atgttgctga	ctataagtcg	aaaggaaagt	ttgatgggtgc	aaaggggtcca	540
gctaaagttg	cccggaaaaa	ggtggaagag	gaagatgaag	aagaggagga	ggaagaagag	600
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<210> 1669

<211> 2821

<212> DNA

<213> Homo sapiens

<400> 1669

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ccaaccccc	ggccgcgcgcg	aatgggtatg	cccggccgga	gttaaggccg	gggggaggcg	240
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ggcgcgggtc	ggggggcgcc	cgaggggccc	gggccgagcg	gcggcgcgca	gggcggcgagc	360
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ccagacagcg	tgccccccat	cgatgtcctc	tggatcaaa	gggcccagg	aggtgactac	540
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atccccgcca	agcttggtcca	gtccactctc	tcagacctaa	gggtgtacct	gggagcatcc	660
acaccagact	tgcagtagca	gcctccttgg	cacctgctgc	caccttcaag	agcccagaag	720
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```

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a 2821

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<210> 1670

<211> 137

<212> PRT

<213> Homo sapiens

<400> 1670

```

Met Gly Leu Arg Ala Gly Gly Thr Leu Gly Arg Ala Gly Ala Gly Arg
 1          5          10          15
Gly Ala Pro Glu Gly Pro Gly Pro Ser Gly Gly Ala Gln Gly Gly Ser
          20          25          30
Ile His Ser Gly Arg Ile Ala Ala Val His Asn Val Pro Leu Ser Val
          35          40          45
Leu Ile Arg Pro Leu Pro Ser Val Leu Asp Pro Ala Lys Val Gln Ser
          50          55          60
Leu Val Asp Thr Ile Arg Glu Asp Pro Asp Ser Val Pro Pro Ile Asp
65          70          75          80
Val Leu Trp Ile Lys Gly Ala Gln Gly Gly Asp Tyr Phe Tyr Ser Phe
          85          90          95
Gly Gly Cys His Arg Tyr Ala Ala Tyr Gln Gln Leu Gln Arg Glu Thr
          100          105          110
Ile Pro Ala Lys Leu Val Gln Ser Thr Leu Ser Asp Leu Arg Val Tyr
          115          120          125
Leu Gly Ala Ser Thr Pro Asp Leu Gln

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130

135

<210> 1671
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 1671
 Met Ala Arg Pro Glu Leu Arg Pro Gly Gly Gly Gly Glu Ser Arg Gly
 1 5 10 15
 Gly Gly Asp Asp Gly Ala Ala Cys Arg Arg Asn Ala Gly Gln Gly Arg
 20 25 30
 Arg Gly Ser Gly Gly Ala Arg Gly Ala Arg Ala Glu Arg Arg Arg Ala
 35 40 45
 Gly Arg Gln His Pro Leu Gly Pro His Arg Arg Gly Ala Gln Arg Ala
 50 55 60
 Ala Glu Arg Ala His Pro Ala Ala Val Arg Val Gly Pro Arg Gln
 65 70 75 80
 Gly Ala Glu Pro Arg Gly His Asp Pro Gly Gly Pro Arg Gln Arg Ala
 85 90 95
 Pro His Arg Cys Pro Leu Asp Gln Arg Gly Pro Gly Arg
 100 105

<210> 1672
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 1672
 Met Gly Leu Lys Ser His Val Leu Pro Ala Pro Asn Ser Gln Gly Gln
 1 5 10 15
 Gly Ser Leu Cys Ile Phe Val Tyr Val Thr Ser Tyr Met Asp Tyr Ile
 20 25 30
 Gln Leu Gln Gly Lys Glu Asn Leu Asp Cys Ser Gly Leu Asn Lys Gln
 35 40 45
 Lys Ile Val Phe Pro His Ser Met Asp Ser Gly Asp Gly Trp Leu Met
 50 55 60
 Val Leu Val Gln Gln Leu His Glu Gly Arg Gly His Val Leu Asp Pro
 65 70 75 80
 Phe Ala Leu Ile Ser Val Leu Val Thr Ser Trp Ser Gln Asp Gly Cys
 85 90 95
 Cys Ile Pro Lys Asn His Val Cys Val Gln Gly Arg Arg Gly Gly Gly
 100 105 110
 Arg Gly Arg Ala Lys Leu Ala Gly Pro Val Thr Phe Tyr Gln Lys Val
 115 120 125
 Lys Pro Arg Gln Lys Ser Val Ser Cys Ser Leu Pro Leu His Ile Phe
 130 135 140
 Thr
 145

<210> 1673

<211> 117
 <212> PRT
 <213> Homo sapiens

<400> 1673
 Met Asp Tyr Ile Gln Leu Gln Gly Lys Glu Asn Leu Asp Cys Ser Gly
 1 5 10 15
 Leu Asn Lys Gln Lys Ile Val Phe Pro His Ser Met Asp Ser Gly Asp
 20 25 30
 Gly Trp Leu Met Val Leu Val Gln Gln Leu His Glu Gly Arg Gly His
 35 40 45
 Val Leu Asp Pro Phe Ala Leu Ile Ser Val Leu Val Thr Ser Trp Ser
 50 55 60
 Gln Asp Gly Cys Cys Ile Pro Lys Asn His Val Cys Val Gln Gly Arg
 65 70 75 80
 Arg Gly Gly Gly Arg Gly Arg Ala Lys Leu Ala Gly Pro Val Thr Phe
 85 90 95
 Tyr Gln Lys Val Lys Pro Arg Gln Lys Ser Val Ser Cys Ser Leu Pro
 100 105 110
 Leu His Ile Phe Thr
 115

<210> 1674
 <211> 90
 <212> PRT
 <213> Homo sapiens

<400> 1674
 Met Asp Ser Gly Asp Gly Trp Leu Met Val Leu Val Gln Gln Leu His
 1 5 10 15
 Glu Gly Arg Gly His Val Leu Asp Pro Phe Ala Leu Ile Ser Val Leu
 20 25 30
 Val Thr Ser Trp Ser Gln Asp Gly Cys Cys Ile Pro Lys Asn His Val
 35 40 45
 Cys Val Gln Gly Arg Arg Gly Gly Gly Arg Gly Arg Ala Lys Leu Ala
 50 55 60
 Gly Pro Val Thr Phe Tyr Gln Lys Val Lys Pro Arg Gln Lys Ser Val
 65 70 75 80
 Ser Cys Ser Leu Pro Leu His Ile Phe Thr
 85 90

<210> 1675
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1675
 Met Gln Asn Cys Val Pro Val Ser Phe Cys Cys Val Thr Asn His Pro
 1 5 10 15
 Gln Thr Trp Gln Leu Glu Thr Asn Pro Val Phe Ser His Asn Pro Met
 20 25 30
 Gly Trp Gln Phe Gly Leu Gly Ser Thr Gly Gln Phe Cys Cys Ser His

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<210> 1676
<211> 1336
<212> DNA
<213> Homo sapiens
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cagcaaagaa	aaggaatagg	atcaagagat	acgtggctgc	tggcagagca	agcatgaatt	180
cgatgacttc	agcagttccg	gtggccaatt	ctgtgttggt	ggtggcaccc	cacaatgggt	240
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cacacacaca	ttcgtgtgct	ctgctgcacg	tgagcttggt	ggttagagga	acaaatatct	1260
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caatgtgaaa	aaaaaa					1336

<400> 1677

Met	Asn	Ser	Met	Thr	Ser	Ala	Val	Pro	Val	Ala	Asn	Ser	Val	Leu	Val
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Val	Ala	Pro	His	Asn	Gly	Tyr	Pro	Val	Thr	Pro	Gly	Ile	Met	Ser	His
			20					25					30		
Val	Pro	Leu	Tyr	Pro	Asn	Ser	Gln	Pro	Gln	Val	His	Leu	Val	Pro	Gly
		35					40					45			
Asn	Pro	Pro	Ser	Leu	Val	Ser	Asn	Val	Asn	Gly	Gln	Pro	Val	Gln	Lys

50	55	60
Ala Leu Lys Glu Gly Lys Thr Leu Gly Ala Ile Gln Ile Ile Ile Gly		
65	70	75
Leu Ala His Ile Gly Leu Gly Ser Ile Met Ala Thr Val Leu Val Gly		80
	85	90
Glu Tyr Leu Ser Ile Ser Phe Tyr Gly Gly Phe Pro Phe Trp Gly Gly		95
	100	105
Leu Trp Phe Ile Ile Ser Gly Ser Leu Ser Val Ala Ala Glu Asn Gln		110
	115	120
Pro Tyr Ser Tyr Cys Leu Leu Ser Gly Ser Leu Gly Leu Asn Ile Val		125
	130	135
Ser Ala Ile Cys Ser Ala Val Gly Val Ile Leu Phe Ile Thr Asp Leu		140
145	150	155
Ser Ile Pro His Pro Tyr Ala Tyr Pro Asp Tyr Tyr Pro Tyr Ala Trp		160
	165	170
Gly Val Asn Pro Gly Met Ala Ile Ser Gly Val Leu Leu Val Phe Cys		175
	180	185
Leu Leu Glu Phe Gly Ile Ala Cys Ala Ser Ser His Phe Gly Cys Gln		190
	195	200
Leu Val Cys Cys Gln Ser Ser Asn Val Ser Val Ile Tyr Pro Asn Ile		205
	210	215
Tyr Ala Ala Asn Pro Val Ile Thr Pro Glu Pro Val Thr Ser Pro Pro		220
225	230	235
Ser Tyr Ser Ser Glu Ile Gln Ala Asn Lys		240
	245	250

<210> 1678

<211> 177

<212> PRT

<213> Homo sapiens

<400> 1678

Thr Arg Pro Arg Arg Ala Ala Gln Gly Arg Arg Glu Ala Pro Pro Gly	
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	20
Arg Ser Arg Ala Gly Asp Arg Gly Val Glu Ala Gly Pro Arg Arg Gly	
	35
Arg Gly Arg Asn Ala Arg Cys Pro Gly Thr Gly Pro Asn Pro Pro Ala	
	50
Ala Arg Asn Gly Met Ala Arg Pro Glu Leu Arg Pro Gly Gly Gly Gly	
65	70
Glu Ser Arg Gly Gly Gly Asp Asp Gly Ala Ala Cys Arg Arg Asn Ala	
	85
Gly Gln Gly Arg Arg Gly Ser Gly Gly Ala Arg Gly Ala Arg Ala Glu	
	100
Arg Arg Arg Ala Gly Arg Gln His Pro Leu Gly Pro His Arg Arg Gly	
	115
Ala Gln Arg Ala Ala Glu Arg Ala His Pro Ala Ala Val Arg Val	
	130
Gly Pro Arg Gln Gly Ala Glu Pro Arg Gly His Asp Pro Gly Gly Pro	
145	150
Arg Gln Arg Ala Pro His Arg Cys Pro Leu Asp Gln Arg Gly Pro Gly	

Arg 165 170 175

<210> 1679
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 1679
 Leu Val Cys Cys Gln Ser Ser Asn Val Ser Val Ile Tyr Pro Asn Ile
 1 5 10 15
 Tyr Ala Ala Asn Pro Val Ile Thr Pro Glu Pro Val Thr Ser Pro Pro
 20 25 30
 Ser Tyr Ser Ser Glu Ile Gln Ala Asn Lys
 35 40

<210> 1680
 <211> 717
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 22, 586, 687, 714
 <223> n = A,T,C or G

<400> 1680
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 ttgtatcttt tatttaggtg ccaaggtata acccactgct tgaacttgtg ccagatgatt 180
 cttccaaaga tgtctcttct ccaagcacca ggtctagctc tttcttgacc agtctgaaga 240
 agccttaggg catcttctct ttcttgga caactttatcta atgcatccat ggaatctact 300
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 ttacttttgt tccttagttg ctgacaggtc catgctgctc cagattttac tttttcttgc 480
 ccccagtttt ttgggtcatc aaaaaattct tctagtcctt tccttgacaa tgtgggatga 540
 agtaatctat attggtgaaa ggatgtcaca ttggtgtac tcttangcaa caaactaaga 600
 aaaaaccctg tcaggcaggg acctgaggag ttattaacga accgggaaga attcagggcg 660
 gatgaaactc tcctaccaag aaaggncaa accgggccgc agccatgttt tccncat 717

<210> 1681
 <211> 305
 <212> DNA
 <213> Homo sapiens

<400> 1681
 ctgtacattt aacaaaatat gtgcaagact gtcattggtga aaactacaaa acaatgataa 60
 aagaaattca agaaaacaaa taaatacagg ggtatactat attcatgaat tgggagaatc 120
 aatatcatta ttaagtctcc tcagattgat ctatagattc acagaaatcc caattcaaac 180
 cctatcagga ctatttgtag aaatagacac actgatgata aaatttacat agaaacacaa 240
 aggaagcaga atagccaaaa attattgggg aaaaaatgta gttgaaggat tcccattact 300

ccttt

305

<210> 1682

<211> 498

<212> DNA

<213> Homo sapiens

<400> 1682

```

aaattacact ccataaattt agacatatgt ctctccaagt aagtacgagc tgattgggaa 60
cgggctccaa tggacatggc tctgcagtca aaatagttag cagatggaca ggtttggaaa 120
atgtgagggc ccatatcatc ataaccagca ataaggagac caacaccata tggctctccg 180
ccatatcggt gtgttggtat ctgggtctct tagactgggt aacgagcttg ttttaacaag 240
gaatgaagta ctgtctttat tttcaaatta tacattatta acaaaggctc ctggcttatt 300
ctttaattgt tgcataatcc accagagaaa taatgcaata ggacactatt tctttggcct 360
aatataaaat gtttgacttt ctaccgaacc taagaaagag tgccagcaaa ataatttctt 420
cccatctaaa acctgatttg ttttggatac aaggggggtc aggatttctt gggacatcta 480
gaaccattaa gaaacttt

```

<210> 1683

<211> 322

<212> DNA

<213> Homo sapiens

<400> 1683

```

aaaaattaaa aatagcacia ttctacaatt ctgattttac caagaaaata aacctttttt 60
ggcacatatt atcctatgaa aatggaaagc tgagtcaggc tgctctgctt ttcacagcac 120
aaataagcat tcatgctatc agacttgagg aattaactcg gtgacaaaaa ttcactggaa 180
aatagaatcc ttggaaaaat ggggtcaggt gccatccact gagaggcaat gataatgtgt 240
gtccttcggt attagcacia agttaggcag cacactataa ttttagctac atgcaactct 300
ataggaacac atgtgggtaa gg

```

<210> 1684

<211> 293

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 51, 182, 188, 195, 203, 220, 246

<223> n = A,T,C or G

<400> 1684

```

aaaagatgct gcttccctgt tttcttccag gaacacagag accaacacgg nttcaaacac 60
agggcgagct tctcactatt tcctgggaat gttacttctc agcccaacac ttctcttccc 120
aagaagttca agttttgaga ctgtttttct ccccggaaca gtacttaaaa aaaaaaaaaat 180
cnttgatntt caaanatggg ttnttttcgt gtcctggaan agcatcagta actaaatatc 240
aagtnttcca caatgctgcc cccctgggg ggctaaccgg atgccaaggg aga 293

```

<210> 1685

<211> 390

<212> DNA

<213> Homo sapiens

<400> 1685


```

aaattgtcta actcctatcc cagtttcttt ttatagtcta aaaacaagga atcacccaag 60
taagatactc cttcagagca ctgctgaaaa cggatcaaac gtagagatcc cccagatccc 120
tgttctcaag tgttaaaaat attttatatt agcacataga atacccttag atatattctg 180
ttatgttcta aagagtttgt gtttccccct ttttgatgat gtcttcaatt tcttctgaga 240
cctttcctgt atagtcattt gggttctattg cttttaactt ctcttgatac tccagcggca 300
aaccattttc ttttgcaccc atgcaaataa tctttttata ctgtggggat gggggagcac 360
tttcgtaatt tgtcatcaga taacttcgac 390

```

<210> 1686

<211> 549

<212> DNA

<213> Homo sapiens

<400> 1686

```

gggtccagtc caacctgctc ctcatatttg taaacatgtg cagaatcaat atgggtggaac 60
ccggcttcta ttgccaatTT gacggcctct agagctttac ttttaggaac ctgggggagc 120
aaccaaacgt aatatttttct gactaatgtg cctgagagtt agttcgggca caagcagcaa 180
cgttcacaaa aatcagcttt tcttcctttc ttggatgagc tctgtatgta gaatcataag 240
cccatcccag tctgactggg tctttcccat ttagtaataa aggttgggca tagcaggaac 300
ttctgcagtc ccagaaaaat cactgaaagt ggaagtgtcc ccaaaacaat ttcactttca 360
gtgatttttt ggaaaaatca acaggacgca actatagtta cagacataat ctttaattatt 420
tttagtatgg tgaaattaac acaaggaaat agccacatgg aaggaattat gaaggaatgc 480
agtgtaaagt cctgtgattc ctctcccacc atgttgcaca gagcgcaactg actttatcca 540
gcatcatat 549

```

<210> 1687

<211> 442

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 34, 50, 67, 382, 384, 385, 435

<223> n = A,T,C or G

<400> 1687

```

caactgcaaa tgaagatcct ttttggatac ttgntgagaa agacacattn ggggggggggt 60
tgtgacnaaa ataacgatgg ccggcttgat cccaagagc tgttaccttg ggtagtacct 120
aataatcagg gcattgcaca agaggaggcg cttcatctaa ttgatgaaat ggatttgaat 180
ggtgacaaaa agctctctga agaagagatt ctggaaaacc cggacttggt tctcaccagt 240
gaagccacag attatggcag acaggctcca tgatgactat ttctatcatg atgagcttta 300
atctccgagc ctgtctcagt agagtactgg ctctttttat aatttggttac cagctttact 360
tttgtgataa aatattgatg tngnntttta cactcttaag tcttaaccac agtcacaatt 420
atcttaatgt agatnataat tg 442

```

<210> 1688

<211> 340

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 23, 52, 56, 58, 60, 62

<223> n = A,T,C or G

<400> 1688

```

ctgccagcta acagcaagag cnttgagggc atcactgaac agatagcacc tnatgngntn 60
tnatgattca aaaatctccc ttgctgttgg atttaccac acgtaggctt ttatttcttc 120
ccattacatc tgtttagcca cagaaagcat cgggccatac tcaactgcaga agataagact 180
tcctcagaat cttatttggt tagtgcactc aattttactt cactgtctca tcacttgaga 240
gactggttaa ggcaagaaac ccatttctta acattttttt tgttttcaaa catttgaaaa 300
gcaacaccaa aacgtatgca gttaattcct caattctttc 340

```

<210> 1689

<211> 140

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 61

<223> n = A,T,C or G

<400> 1689

```

ccagagggcc tgcacatgca atttccagtc cctgccttca gagagctgaa aagggggcct 60
nggtctttta tttcagggtt ttgcatgcgc tctattcccc ctctgcctct ccccaccttc 120
tttgagagcaa ggagatgcag 140

```

<210> 1690

<211> 485

<212> DNA

<213> Homo sapiens

<400> 1690

```

gagattatta cccagaattc acatgtaggg atggggaagg acaatttttt tttaactaaa 60
aaagttagcg gcaggggttg ggggtggcaa tcatttttct tcctatacat acaaaggata 120
ttgtcaaaaa tggcggttct ctcttggtggc ctgttattct gattgctgct gtatacagtt 180
ttgtcactct ttagttttta gttaagcata ctgatagact ttctctataa agccattcac 240
tccagatttt acctggggaa tattctacat actgcttact ttctctataa aactcatcaa 300
taaatcatga aaggcactga gttttgtaaa tcaggacct aaatgtttta ttgtaaataa 360
gtttcagata attattatag ctttgcggtg aagtttggtt ttttttttct caactagtta 420
agtcaactgc ttctgaaata actctgtatt gtagattatg cagatcttta caggcataaa 480
tatttt 485

```

<210> 1691

<211> 342

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 11, 24, 26, 49, 50, 51, 53, 61, 62, 142, 173, 190, 193, 242, 250, 291, 303, 304, 315, 329

<223> n = A,T,C or G

<400> 1691

```

gaagaaacaa ngatgacttt ttnanaaca aagcataatg ctggcaatnn ngnggggggt 60
nnagttttcc aaacatgtta tcttaaatac ccctttatcc ttacagggtg acataacttt 120

```

```

gaatgtttta acagcaagaa tnttaagaaa agataaacac catttttattt atntataaaa 180
acaaaattan ttncaaatat ttttgacatt gtgattttttt ttttccacat ttctcagcaa 240
anctaattggn attttaatat ttattttttgc ctgtcataag aaaactctta nctgaaatgg 300
ccnnaaaact gtganacatg ctatggaanc tgaatgccgg ac 342

```

<210> 1692

<211> 450

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 23, 59, 60, 409, 417

<223> n = A,T,C or G

<400> 1692

```

aaaaatgggg ccccaaagac tgntaagagc tcatccccgt ggtctcctat caccgggggnn 60
gggggttcatt tctgatgaga agcttggacg gtactgaaac tcatacatgt aggtgggtgc 120
tccagcatct ctgtggttcc gggccacaat cacagatggg acaccaaaca tcacatctgc 180
tatcaagtcc aggaacaggt ctttcttttt gacagtgtcg tctgttcctc ctaagtattt 240
ctcagtggct tctggaatca gttccttagc aatgcaaaca aggggatagg acttccacag 300
gagtgcacatg gctgtcttct ggtccagttg cccttcggag agtggatagc tcatcaactg 360
cattggaatc aaccagccaa actcctgctt gttaattccg accatgtang ggacagngtg 420
gaaattcctt tcagcttgaa agctcttcag 450

```

<210> 1693

<211> 436

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 20, 51, 52, 58, 62, 286, 323, 333, 375, 385, 399, 401, 402,
407, 410, 426, 432

<223> n = A,T,C or G

<400> 1693

```

ctatttttatt aacatcatgn tttaataaat aactggctac ttctaataaaa nnggggggnct 60
cngttttacaa cagcccccaa tattccattt tgaccactct gcagaatttg gtgtaaaaag 120
ttgaatgaaa tgtagaccct gagctatcaa gtaattatgt ttcaatataa aaatagagaa 180
ttactcttac aactgaagat tgaacaataa cacaacaac ctctttgttg gtttttaggtt 240
cggtaaaatt agttgggatc ttaatggctg tctaaagcag gaaganacag aatttttaatc 300
tttctgaaga cttctgggaa ctncctttgaa agngattttg taccttatca gagtttatga 360
gctattattt tggtnaaggc acaangaaag gattcccang nngttgntan tcttttgccc 420
tggacnacaa anattg 436

```

<210> 1694

<211> 313

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 29, 32, 34

<223> n = A,T,C or G

<400> 1694

```
attatctgca aggttttttt gtgtgtgtnt tngnttttat tttcaatatg caagttaggc 60
ttaatttttt tatctaataga tcatcatgaa atgaataaga gggcttaaga atttgtccat 120
ttgcattcgg aaaagaatga ccagcaaaag gtttactaat acctctccct ttggggattt 180
aatgtctggt gctgccgcct gagtttcaag aattaaagct gcaagaggac tccaggagca 240
aaagaaacac aatatagagg gttggagttg ttagcaattt cattcaaaat gccaaactgga 300
gaagtctgtt ttt                                     313
```

<210> 1695

<211> 522

<212> DNA

<213> Homo sapiens

<400> 1695

```
ccatttttcag gggaagcttg ggagagcaat agtatgggtga gccccttaga gatgagcgcc 60
tactccttct tggcgaatgc tgccttcaga tgcttaccaa gtggctcactg catctagtaa 120
gattatatatt ccagtacact tccttagggc agaaacacca tcctatcagg tttgggtcagt 180
cccttcttca tgaagggagt catggggaat tcctgaaaat tttcttcctt ctgcagacag 240
ttggatgagt cccttagaga aggcatccag agacataact aaactgaata tcatcccata 300
ttgatttttag gaattgactc taaaactctg tgcagaatct tgtgttgga ttgtatcttg 360
acattcctgt tgtgttattt ttcttaactg gagtgtgtgc tgcctttcag gtacaatttt 420
tgtgtaataa aagccagtgc attaagttta tatagactac tttctatgca agactgagat 480
atggaataga taggaagaga tatgtactgc tgggtacatg ga                                     522
```

<210> 1696

<211> 174

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 52, 55

<223> n = A,T,C or G

<400> 1696

```
ccagccattg cctggcattt ggtagtatag tatgattctc accattattt gncanggagg 60
cagacataca ccagaaatgg gggagaaaca gtacatatct ttctgtcttt agtttattgt 120
gtgctggtct aagcaagctg agatcatttg caatggaaaa cacgtaactt gttt       174
```

<210> 1697

<211> 561

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 22, 55, 56, 198, 265, 374, 378, 399, 410, 465, 543, 549

<223> n = A,T,C or G

<400> 1697

```
ctgtaatgtt attgcagatc cncatctctc gctcaactgt taatgtctca acctnnagag 60
gcaccccacc cagcacactg tcagtaaagg ggcagattga aacagtgaga gttaagggta 120
```

```

cagtagaaaa ttctgcatgt ttgcagtgac tagaatcaga tagtagtgtg gtgggtttttt 180
tttttaataca ttatgaanag tgggagcttg caggtaaggc ttctgtggtg gtttgaaaag 240
cagaaagcaa taaatgaaac aaagngtttg tgtaatatat tcctgccttg tcttcttcac 300
tcagagttga aatagggtttt gcagtaaagc tggaaaaaaa aagaaaacaa atgttcaaaa 360
ctgtgtgtgt tggngggngg aatttccttt gcttatagna gtttcagagn aactatatgt 420
tttttttcct ttctttttca caggcacaga aaactgaatc tgtanataac gagggaaaat 480
gaattgcatg aaaaattggg gttgatttta tgtatctctt gggacaactt ttcctcggcc 540
gcnaccacnc taagggcgaa t. 561

```

<210> 1698

<211> 267

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 58, 62, 63

<223> n = A,T,C or G

<400> 1698

```

cgaggtctgc cctcgattgt gtatttctgt tggatcaaac actcccatgt taccactngg 60
cnncataatg tatcgatata tattccaagt ggcaacaggt aagttgagaa ggaagatgaa 120
ccagtgcaat gacatgagca gtaatacagt gacaatggta tggccactta aattaaaaat 180
ataacaaaat tgaaaaatag acatataacc aaaaagattc taaatcttgc aaggaaaaaa 240
agaataaagc tgccaataag ttattttt 267

```

<210> 1699

<211> 449

<212> DNA

<213> Homo sapiens

<400> 1699

```

tgttaagatt ttttttgcta caaagaggag gtggcaatgg tagatccacc cttatgcttc 60
tcagtttagc ataacctctt atggattttc atcaaattca gcgtgttggt cactggaaag 120
agccttttcc ttctcctttt cttactctcc cctcatgggt tccccctctt aaaggagagg 180
agcttttaat ttacacttac cacctcattt gcttttcttg aggccatgca atataggcgg 240
gactacagag ttaatctcct ttttaciaat gaggccaaga gaagcctcat tggttcacag 300
tcatgcagct catactgtcc acccttgtat tctcagatgc aggacaattg catttttagt 360
ttattttgtg gaggtgcaga atatttactc tttctgtcca acccttgatt ctgccgagga 420
agacactgat ggtttgatga gtgattcag 449

```

<210> 1700

<211> 398

<212> DNA

<213> Homo sapiens

<400> 1700

```

acatttcaca aataagatgt agctttccaa acaaatccat tcgatgacca ttatcacaac 60
tatattttat tctaatttat aaaacaaaaa atggtttagac aagcacatga tatcaagagt 120
cttcaacaca gtggattcca ttttattaag aaaaaaata gaaaacaagt agtccttaaa 180
ttgtcttagc tctccatagc atacgttata taaaattaaa gttttgcttc caaaaatatg 240
tttccatgtg gtcgtgggtg tgtccagtgc tattagggcc aaagcaccaa agacatgaga 300
agtttaacca tcgacttgtc atttttcata aaagctaaac atttccttat aggtctggag 360
taaaatcttc taggcatttt agtgctaaaa gtcacttt 398

```

<210> 1701
 <211> 257
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 4, 12, 13, 27, 47, 53, 61, 63, 76, 77, 78, 79, 86, 87, 88,
 89, 92, 93, 97, 100, 101, 103, 127, 129, 130, 133, 134,
 141, 142, 143, 147, 149, 152, 155, 164, 166, 174, 185, 188,
 194, 203, 205, 220, 228, 237, 238, 240, 241, 246, 251
 <223> n = A,T,C or G

<400> 1701
 aaanaacact annggacctt agagatnata actgtttgat aatttgntct agncgtattg 60
 ncntaaaaga tatatnnnng gggggnnnnt cnntgtnaan ngntgtttgg attgcctgat 120
 attatancnn ggnngttggg nnntatntna cncantatac ctengncgca accncgctaa 180
 tggcnagnat catnacactg gcngncgtta ctactggatn cgagctcngt gccaatnncn 240
 ncgtentcat ngcccta 257

<210> 1702
 <211> 526
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 9, 476
 <223> n = A,T,C or G

<400> 1702
 acctaattna ttgaagtaat aaccaaataa ttttcaatct tgattcaact gtgattcaaa 60
 tcttacacca tttgccact tctatgaatt ttatgtataa aattttttta gagtcagagt 120
 ttttttttctt gattaattgg atgtatttca cagaatttcc aactgctcac gttagttttc 180
 ttccttttag agttgatctc tctaattgtat tagatcttca tgcctttgat agtctctctg 240
 gaataagttt gcagaaaaaa cttcagcatg tgccaggaac acaacctcac cttgatcaga 300
 gtattgttac aatcacattt gacgtaccag gaaatgcaaa ggaagaacat cttaatatgg 360
 ttattcagaa tcttctgtgg gaaaagaatg tgagaaacaa ggacaatcac tgcattggagg 420
 tcataaggct gaagggattg gtgtcaatca acgacaaatc acaacgagtg attgtncagg 480
 ggggtccatg agctctgggtg atccgggagg agactccaat gagctg 526

<210> 1703
 <211> 116
 <212> DNA
 <213> Homo sapiens

<400> 1703
 gacctccgaa ctgagctcta atttagctga tcagattttg cttgggtaaa gttccttttt 60
 aatgttctaa agtgttttacg gttctcaa atcagtttaa aactaatttt aggtgg 116

<210> 1704
 <211> 241
 <212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 209, 230, 235

<223> n = A,T,C or G

<400> 1704

```

aaaaattgtg taattgttaa atgtccagtt ttgctctggt ttgcctgaag ttttagtatt 60
tgttttctag gtggacctct gaaaaccaa ccagtacctg gggaggtag atgtgtgttt 120
caggcttgga gtgtatgagt ggttttgctt gtattttcct ccagagattt tgaactttaa 180
taattgcgtg tgtgtttttt ttttttttna aggggctttg ttttttttn tcaanaaaaa 240
t                                                    241

```

<210> 1705

<211> 336

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 9, 12

<223> n = A,T,C or G

<400> 1705

```

ggtcctgtnt anacacacat caatatgaaa caaaaaaat ttatataaat aagtcaatta 60
aacttcacaa aaactaaaga aacacaagac aaaaatccaa caagcaataa aaactgtaca 120
atattgggtca gtcttttata tctgaaaaat gtgtaactta aaaaaaagtt atttatcgta 180
taaaaaaagt cttttacatc tgtgttagct ggagtgaaaa cttgaagact cagactcagt 240
ggaaacagat gaatgtccac ctgcgtttcc tttggagagg atcttgaggc tggaccctct 300
gctcacagag gtgagtgctg gctgggcaga ggtttt 336

```

<210> 1706

<211> 107

<212> DNA

<213> Homo sapiens

<400> 1706

```

aggggtggctc tgggagcagt tgtgctgcgg gcttgctggg ggagaactct aactgttgca 60
gaaacagagc ttcattggctt gcttaaatta cttagctgga atatttt 107

```

<210> 1707

<211> 512

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 468, 470

<223> n = A,T,C or G

<400> 1707

```

ttttttgtct ggtaattata tatttattat ttagcaaaac tgaagaaaaa aagcacagaa 60
ttgtttcaac agatgtctct cattttcagc tagcatttct ctcccaagtt gagctgggtt 120

```

```

aatgtgtttt ggatttccct cctcaattgg cttatttttt agatcacctg caattcattt 180
gcaaattgca ataaaacaca ttttagaaaa aaggaacctt caattattag ctttgtttct 240
ttttaaatgt atatatatttg actaatgttt gtgaatgaag ttggctaaca tgtatttagt 300
ttcatttttg cggtatgtaa tataaagttt ttaaaatttt aaatatgggt ttaaccttta 360
tgtgtaaatg attttctagt gtgaccttct aatttaatat tagacgtcta aggtatatct 420
gtaaattaga atccgactat cactctgttc attttttttg aacaaagnn ttaaagaaag 480
cctgaaccag ggaaaaaaaa aaaaaaaaaa aa 512

```

<210> 1708

<211> 203

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 28, 36

<223> n = A,T,C or G

<400> 1708

```

aatcttctaa aggaagaaca gaccccnag aataanatta cagttgttgg gggttggtgct 60
gttggcatgg cctgtgccat cagtatctta atgaagacta taatgtaact gcaaactcca 120
agctgggtcat tatcacggct ggggcacgtc agcaagaggg agaaagccgt ctttaatttg 180
tccagcgtaa cgtgaacatc ttt 203

```

<210> 1709

<211> 271

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 1

<223> n = A,T,C or G

<400> 1709

```

ngttgaaaaa atagatccaa tcagtttata ccctagttag tgttttgcct cacctaatag 60
gctgggagac tgaagactca gcccggttgg ggctgcagaa aaatgattgg cccagtcctc 120
cttgtttgtc ccttctacag gcatgaggaa tctgggaggg cctgagacag ggattgtgct 180
tcattccaat ctattgcttc accatggcct tatgaggcag gtgagagatg tttgaatttt 240
tctcttcctt ttagtattct tagttcttca g 271

```

<210> 1710

<211> 239

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 58

<223> n = A,T,C or G

<400> 1710

```

tacaaaatat tttaattgta agtgggtcaga ggaattcttc tggtttctcc cttatggnta 60
tttttaattt gtacaatagt tgcttctgtc aactcagcga caatgccatc atagctttca 120

```

aatgagatca ccctgtagat cgatggacta tgccttaaag ttgcagatgc ataaaggaga 180
ctgaggacaa atggtgaaaa ctgtagttac tgaacccaaa tgttactcag agatatcaa 239

<210> 1711

<211> 122

<212> DNA

<213> Homo sapiens

<400> 1711

agtgtagtgt aacacagaag agtgacatgt ttacaaacct caagccagcc ttgctcctgg 60
ctggggcctg ttgaagatgc ttgtatttta cttttccatt gtaattgcc tgcctatcac 120
ag 122

<210> 1712

<211> 169

<212> DNA

<213> Homo sapiens

<400> 1712

ttcccataaa taaaagtaca gttttcttgg tggcagaatg aaaatcagca acttctagca 60
tatagactat ataatcagat tgacagtata tagaatatat tatcagacaa gatgaggagg 120
tataaaagtt actattgctc ataatgactt acaggctaaa attagtttt 169

<210> 1713

<211> 392

<212> DNA

<213> Homo sapiens

<400> 1713

tgacagagag gatggcgctg tcgaccatag tctcccagag gaagcagata aagcggaagg 60
ctccccgtgg ctttctaaag cgagtcttca agcgaaagaa gcctcaactt cgtctggaga 120
aaagtgggtga cttattgggtc catctgaact gtttactgtt tggtcatcga ttagcagaag 180
agtccaggac aaacgcttgt gcgagtaaata gtagagtcac taacaaggag catgtactgg 240
ccgcagcaaa ggtaattcta aagaagagca gaggttagaa gtcaaagaac atattcttga 300
aagttatgat gcattctttt ggggtgtaac agatcataaa gacatttttt acacatcagt 360
taatattgga ttattaaata ttggctataa aa 392

<210> 1714

<211> 301

<212> DNA

<213> Homo sapiens

<400> 1714

tgggagggat attttcccac aggaacaagg gtctccgtga tgacacgggg tctctatagt 60
catgttgaga gcctaattggc ccttggcata attgctggtg ttggggtaga aggtgtcttg 120
gagtttgctc aagtgggtga gagggaggga ggtgccatag acttggagga actggcacga 180
agccaaggat acaaatccag gcagggtgtg ggggcaggat agggagcagg gccttctact 240
gaaggagtga ctcaggaagg aggaggggaa ggtgacaagc ccctgggcag gagccctgtg 300
g 301

<210> 1715

<211> 194

<212> DNA

<213> Homo sapiens

<400> 1715

```
taaattcagg ctaacttctg aaaatcccgt tttattcacc tcactgtggt accagtaact 60
atactgagtc aggttacttt acagttaact atgtcaccta aaacacaata atccattaac 120
actctaataa cagttattgg gtgtgggtcat actggaaatt cttaaccata tagttgtctt 180
gccaatTTTT tttt 194
```

<210> 1716

<211> 185

<212> DNA

<213> Homo sapiens

<400> 1716

```
gtaggaatgg gttcttggtg cacaagatag tattgttgag ctagttttcg agctctgtgc 60
acaagcactc ttttaattccc acggacgggg ctctccagc tacagcagcc aaagcatatt 120
caatctggac aagtttacca gacgggctga atgtagtcag cgaaaaactg taccgcgcgt 180
ccgcc 185
```

<210> 1717

<211> 296

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 3

<223> n = A,T,C or G

<400> 1717

```
aanaggctct tgggtggagag gactgtgaag ccgtcggcag gtgtgccctc gggtgtgccg 60
tcggcgctgg ctgccttact gacttcaccc tgcttcttct tggatttccg ggcccctttc 120
ttgcctcctg cttttttaga tgcaggcttc ttctgggatg gagacttggc ctttttggct 180
gggggtggtg tgatgatggc ttccaacttt cctttggatc cccgcttctt cgctagcaac 240
tcgggggtgga tggtgggtaa cacaccccca ctggctatgg tgactccttt tagcag 296
```

<210> 1718

<211> 343

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 208, 322, 341

<223> n = A,T,C or G

<400> 1718

```
atggcattaa ttgttccttg cttttatagg gtgtattttg tacatttttg atttctttat 60
ataaggtcat agattcttga gctgttggtg ttttttagtgc acttaatat agcttgctta 120
aggcatactt ttaatcaagt agaacaaaaa ctattatcac caggatttat acatacagag 180
attgtagtat ttagtatatg aaatatntg aatacacatc tctgtcagtg tgaaaattca 240
gcggcagtg gtccatcata ttaaaaaatat acaagctaca gttgtccaga tcaactgaatt 300
ggaacttttc tcctgcatgt gnatatatgt caaattgtca ngc 343
```

<210> 1719

<211> 193
 <212> DNA
 <213> Homo sapiens

<400> 1719
 tcgaggaccc ccgagatgca gaggatgcta tttatggaag aaatgggttat gattatggcc 60
 agtgtcggct tcgtgtggag ttccccagga cttatggagg tcgggggtggg tggccccgtg 120
 gtgggaggaa tgggcctcct acaagaagat ctgatttccg agttcttggt tcaggacttc 180
 ctccgtcagg cag 193

<210> 1720
 <211> 176
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 30, 91, 145, 168, 170
 <223> n = A,T,C or G

<400> 1720
 tgattcagaa ttttttttaa tgaaaggatn attgcactaa ctttcttcct gctgctctga 60
 ttctgcattt gtggtacttg tgactacgtt ntttcaaata tagatagatt taagctgcta 120
 attttttttt ttttagtaac cactnctata tcatgtcttt tactctgntn ataata 176

<210> 1721
 <211> 128
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 9
 <223> n = A,T,C or G

<400> 1721
 tattcttang aaacttcctt aatcccttgg aaattcccg gtccttcaag aataaaaaaa 60
 aaagggtcaa gaagaacaaa ttaccaaagg gaaagaatgg ctttcaatat aataagggtcc 120
 atttttta 128

<210> 1722
 <211> 285
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 34, 140, 165, 170, 230, 255
 <223> n = A,T,C or G

<400> 1722
 ttatgaagtt gacaaataaa taaaaggtag tggntatgtc tgagcttatt gtgtttgagc 60
 taacaccagg ttactcagta accatgacct gtcctccat ttccatttat tctcaacatt 120
 aaatagtttt atcttggtgn tgccagaaat gcacttgtgc caggattgn ccctgctgta 180

tgaaaagctt cttggcaatg aattctgtaa taagtgccct acattatggn tttctggtgg 240
aattggttta acagngacaa cccaggattt ccaatatatt tttgt 285

<210> 1723

<211> 536

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 33, 66, 67, 68, 406, 437, 450, 462, 498, 515, 516

<223> n = A,T,C or G

<400> 1723

cttggcttgc aggtggcacc ttctcactat gtncctacat ggccttttct ctgtggagag 60
ggacannnag catgagcagg ctctgggtgc tcctcttctt ataaagacac taatatacacc 120
atattagggc ttaaaccctat gacctcattt aaccttaacc ccttaaagggt cccatctcca 180
aaaacagtca catagcaggc tactgcttca acatatgcat ttgggggagg ggacaccatt 240
cagttcttaa cagggtgggc accgcaaaca tggaaagtca gagccttctc cccttcagaa 300
ttcccgcgcc caccagggga tggggaagag gagcagagag gtatgggaag cagacacgga 360
gagtggcagg taccatgctg gggtgggctc aggagtgcct tcgganggac atatggaact 420
ggcagggctc aatgcangga gggcggaagn ccttggaag ancccgtggc ctgagaaagg 480
ggctgggcta caaccctngg caagttactt taccnntgac cttcgatgct tttggg 536

<210> 1724

<211> 145

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 4, 12, 27, 32, 45, 47, 48, 59, 61, 65, 93, 98, 103, 121

<223> n = A,T,C or G

<400> 1724

ctgncctttt gnaacaggac cctcacncta tncaatgggg ggttnanntg aagcatganc 60
ntatncatgc ggaaaaccca actcatgtga gcncaaancg gancgacca gacaaccatg 120
natgcggcta atatggggag agaaa 145

<210> 1725

<211> 173

<212> DNA

<213> Homo sapiens

<400> 1725

caattctgga attaccact tgtttaattt tgagcaacat gatctagcat taatgtagtc 60
acattctaaa tcagacaatg taattatgaa gtagaccgag aggaagatga ggcgcgaaca 120
atcgaggaga gagaagacga acaccaccgc ctccatcctc ctccctccgtc gcc 173

<210> 1726

<211> 302

<212> DNA

<213> Homo sapiens

<400> 1729							
acanaccgta	tactttatgc	aaacaaagtg	atgcctcact	gacttaggag	acaagtcaca		60
tgccatcagt	gtgtcagaaa	attttctttct	tcagtgatag	ttaaggtaac	ctcgccagct		120
actttccaga	gacagctcca	gggcaatact	ggggaaaaaa	aaatcagaga	cataggaccc		180
caatagagcc	ctgtgcaaca	aaaagatgct	agataacaaa	actcaaagca	aaactaagat		240

cattccaatt taggggaaag tttttttatt cagtgtttta gattaataaac tacaagattt 300
tgcttgacag 309

<210> 1730

<211> 285

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 2

<223> n = A,T,C or G

<400> 1730

anctgtactg tatttatgtt gctattggtc aaaagagatc cactgttgcc cagttggtga 60
agagacttac agatgcagat gccatgaagt acaccattgt ggtgtcggct acggcctcgg 120
atgctgcccc acttcagtac ctggctcctt actctggctg ctccatggga gagtatttta 180
gagacaatgg caaacatgct ttgatcatct atgacgactt atccaaacag gctgttgctt 240
accgtcagat gtctctgttg ctccgcccac cccctggctc tgagg 285

<210> 1731

<211> 244

<212> DNA

<213> Homo sapiens

<400> 1731

cattaccttg ctaaaatttc cactaagcta cagcttcaga tatttacaag aaaaataaat 60
atcttttaac agacttcaat gtggtttaac agcaagctag ctgaggagtt gtattttgtt 120
gttatttcag gtaacttttt attaagaaac agttaatat tcagcgatta caatttcagg 180
tgttcaaaac tcaagaaggg tcatcattat actctgaagc agaattcttc aggtactcat 240
cttt 244

<210> 1732

<211> 272

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 9, 65, 192, 210, 212

<223> n = A,T,C or G

<400> 1732

ctgggaagnc agttcgttct ctctctctct ctcttcttgt ttgaacatgg tgcggactaa 60
agcanacagt gttccaggca cttacagaaa agtggtggct gctcgagccc ccagaaaggt 120
gcttggttct tccacctctg ccactaattc gacatcagtt tcatcggagg aaagctgaaa 180
ataaatatgc angagggaac cccgtttgcn tncgcccac tcccaagtgg caaaaaggaa 240
ttggagaatt ctttatgttg tcccctaaag at 272

<210> 1733

<211> 388

<212> DNA

<213> Homo sapiens

<220>
 <221> misc_feature
 <222> 2
 <223> n = A,T,C or G

<400> 1733
 anttgggaaga gcatatgaac acggggccagc tagcaggatt ttcacatcaa attagaagtc 60
 tgatttttgaa taatatcatc aataagaagg agtttgggat tttggcaaag accaaatact 120
 ttcaaagtgt gaagatgcat gcgatgaata ccaacaatat cactgagcta gtgaactatt 180
 tggcaaataga cttaagttta gatgaagctt cagtcttgat aactgaatat tcaaagcact 240
 gcgggaaacc tgtgcctcca gacactgctc cctgtgaaat tctgaagatg tttcttagtg 300
 gattatcgta aatcactgaa cctttttttc aagaaggaca agaatttttg agtctgctat 360
 taatgggacc atatttatta cagttttt 388

<210> 1734
 <211> 282
 <212> DNA
 <213> Homo sapiens

<400> 1734
 tttggaatgt aaaattaatg gtatctggta tcaagttgta agaaaaactc ccccagattg 60
 ggaggtaact gagtgatatg tgaaagaatc ttcccgtctg aatttaagaa tacacctaca 120
 ctgggcagaa aaagggtggg gagaggaagt agaagtagag gaaaagcaca actccactgg 180
 cttcaatcaa actgaggtaa ctaattagag acggaaaata aataaatcaa caaatgcccc 240
 atttttgttt tccaaaaaag atcactggca actaacaatt tt 282

<210> 1735
 <211> 268
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 1
 <223> n = A,T,C or G

<400> 1735
 ntaagccagc cttcctcaag aatgccagac agtggacaga gaagcatgca agacagaaac 60
 aaaaggctga tgaggaagag atgcttgata atctaccaga ggctggtgac tccagagtac 120
 acaactcaac acagaaaagg aaggccagtc agctagtagg catagaaaag aaatttcac 180
 ctgatgttta ggggacttgt cctggttcat cttagttaat gtgttctttg ccaaggtgat 240
 ctaagttgcc taccttgaat tttttttt 268

<210> 1736
 <211> 478
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 2
 <223> n = A,T,C or G

<400> 1736

```

tnatagactt ttccaatggc ccccttataa caccagaaag gattgtaatc ttgggcgtat 60
tttgtgctgg catcttttggc agttgtgaag atcttgtacc agagcgtggc gttgctgtac 120
gtgtcaggaa cacagtgcgg tggctgtaca gtgacgggga acaccccagg gctggccgtg 180
agggtcatgc aggctgtgaa taccacctgc tcacagtgc cgtggagggc gcagtcattc 240
gagctccacg ctgtaggcag ggtgaagggt atgtttatct cctcgtgggc ttccctgcct 300
gaaagtccaa tctgatgccc taagatgggt gagtacagat ggggtgacgt gcgggaatac 360
cctccgaagg gtttcagtgg gtccagggtt agggtgattg agactgagat attcaccggg 420
cccagatcct ccagggcctg gggggactgg gtggaagctc gggcctgccc gctgggtca 478

```

<210> 1737

<211> 489

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 5

<223> n = A,T,C or G

<400> 1737

```

ctttnaggat ggcgagtagc agcggctcca aggctgaatt cattgtcggg gggaaatata 60
aactggtacg gaagatcggg tctggctcct tcggggacat ctatttggcg atcaacatca 120
ccaacggcga ggaagtggca gtgaagctag aatctcagaa ggccaggcat cccagattgc 180
tgtacgagag caagctctat aagattcttc aagggtgggt tggcatcccc cacatacggg 240
ggtatggtca ggaaaaagac tacaatgtac tagtcatgga tcttctggga cctagcctcg 300
aagacctctt caatttctgt tcaagaagggt tcacaatgaa aactgtactt atgttagctg 360
accagatgat cagtagaatt gaatatgtgc atacaaagaa ttttatacac agagacatta 420
aaccagataa cttcctaatt ggtattgggc gtcactgtaa taagttattc cttattgatt 480
ttggtttgg                                     489

```

<210> 1738

<211> 262

<212> DNA

<213> Homo sapiens

<400> 1738

```

gttacagatg acatgtatgc agaacagacg gaaaatccag agaatccatt gagatgtccc 60
atcaagctct atgatttcta cctcttcaaa tgccccaga gtgtgaaagg ccggaatgac 120
accttttacc tgacacctga gccagtgggt gcccacaaca gccaatctg gtactcagtc 180
cagcctatca gcagagagca gatgggacaa atgctgacac ggatcctggg gataagagaa 240
attcaggagg ccatcgcagt gg                                     262

```

<210> 1739

<211> 422

<212> DNA

<213> Homo sapiens

<400> 1739

```

ccaccatcct tttgagacag ttcttatcaa caatcttgaa ccataactaat acattacttg 60
ttcctgaagt ccttttgggt tagctcataa taaaataagc aatacaaatg aattatctgt 120
atttaaggga aaagaaacat ttacaagaaa acacaaaaat ataactgtta taattcatta 180
tgaataaata tacactttga actggctaag tacaatcttt atacattggt taagatttaa 240
tacagtttat tagccatttt cttttttcac acaatgtata tcaaaattaa aaaaaatac 300
tgatttatag aaaaatggca aagtacagta gttccattcc aatttgaagg gccatgaaaa 360

```

gccactgcaa gaccttttag cctaattcaa acctgtaaac atgttcagtc ttttttacct 420
gc 422

<210> 1740
<211> 92
<212> DNA
<213> Homo sapiens

<400> 1740
gctaaatacc tatctaattgt gctatgttta tcaaatacgtg tactaaaatg gaaagctagt 60
tttgagaaat tattcagaag ccttggttatt tt 92

<210> 1741
<211> 188
<212> DNA
<213> Homo sapiens

<400> 1741
tttcaattct tccaaaaggc tcaaagatcc cacgaagcat atcttcagtt atgttgaagt 60
gtaatgagcc cacataaagc ctcataaggc cagcacttcc cttttgtaaa ttgtttgcca 120
ttgctgcagc tctgtttttt tctgcctgtg atgcctgtac tatgattggc acgcctaaaa 180
ctcgttgg 188

<210> 1742
<211> 285
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 3
<223> n = A,T,C or G

<400> 1742
ttnaaaatac tttcaggctc caccaaaaacg tagaactgaa agcatgtatt ttggaagaaa 60
gagatacatt ttgtatgctt tcttttcctt ttgtagattc ccagtttatt ttctaagact 120
gcaaagatca ctttgtcacc agccctggga cctgagacca aggggggtgtc ttgtgggcag 180
tgaggggggtg aggagaggct ggcattgaggt tcagtcattc cagtgagctc caaagagggg 240
ccacctgttc tcaaaagcat gttgggggacc aggaggtaaa actgg 285

<210> 1743
<211> 117
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 2
<223> n = A,T,C or G

<400> 1743
angatctata gacacttttag gcaaaacagg ctcataaagc aattaaataa tcaacaattt 60
agtaaaaaca ggctacatag tatttttggtt ttacgtttca tttgtctatt gatcttt 117

<210> 1744
 <211> 111
 <212> DNA
 <213> Homo sapiens

<400> 1744
 aaacaatggg ctaaaaataa acagtattaa aaggттаagt ttatataata catatgtaca 60
 caattagtgг tgtttttcttt tcagacaaaa tactgaaaca aatattagtt t 111

<210> 1745
 <211> 305
 <212> DNA
 <213> Homo sapiens

<400> 1745
 ctgccagtag acccccggtc accctgaggc tggтggтccc tgctagtcag tgtggctctc 60
 tcattggaaa aggtggatgc aagatcaagg aaatacгaga gagtacaggг gctcaggтcc 120
 aggtggcagg ggatatgcta cccaactcaa ctgagcgggc catcactatt gctggcattc 180
 cacaatccat cattgagtgt gtcaaacaga tctgcгtggt catgtttggag tcccccccga 240
 agggcгcгac catcccgtac cggcccaagc cgtccagctc tccggтcatc tttgcaggтg 300
 gtcag 305

<210> 1746
 <211> 319
 <212> DNA
 <213> Homo sapiens

<400> 1746
 aaaataagtg aataagcgat atttattatc tgcaaggттt tttttgtgtgt gttttttgttt 60
 ttatttttcaa tatgcaagtt aggcttaatt tttttatcta atgatcatca tgaaatgaat 120
 aagaggгctt aagaatttgt ccattttgcat tcгgaaaaga atgaccagca aaaggттttac 180
 taatacctct ccctttgggg atttaatgtc tggтgctгcc gcctgagттt caagaattaa 240
 agctгcaaga ggactccagg agcaaaaagaa acacaatata gagggттgga gttgttagca 300
 atttcattca aaatgccaa 319

<210> 1747
 <211> 177
 <212> DNA
 <213> Homo sapiens

<400> 1747
 aaatcctttt ccataaata aaagtacagt tttcttggtg gcagaatgaa aatcagcaac 60
 ttctagcata tagactatat aatcagattg acagcatata gaatatatta tcagacaaga 120
 tgaggaggta caaaagttac tattgctcat aatgacttac aggctaaaat tagtttt 177

<210> 1748
 <211> 237
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 9, 12, 15, 25, 172, 225
 <223> n = A,T,C or G

<400> 1748

```
ctgaaggant gnaantagac tggtnagagag aggaaggcac tgagccacat gaaggatatgt 60
acgtaggttt tgttcagtgg aaatagactg gtagagagag gaaggcactg aaccacatga 120
aggtatgtgt gtaggttttg ttcagtggaa atagactggt agagagagga angcattgaa 180
tcacatgaag gtacgtgtgt aggtttttgtt cactgacttc ttcantgtct cagccag 237
```

<210> 1749

<211> 244

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 87

<223> n = A,T,C or G

<400> 1749

```
aaaaggcccc attatctgac aaaatagatg gtgaacatgc actatcccag gatatctatt 60
attatccaaa gaagtgtttc tcaaagngtg gtccatggta ctgggtccatg aattgggttg 120
taccagtcaa tgaagagata aattacttgc atcagagtgt aaatcaatac attgcttttag 180
ctattaataa aatttttgcta aaaaatcaaa tcctgtcatt gacctaaaaa gtatctctag 240
attt 244
```

<210> 1750

<211> 289

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 247

<223> n = A,T,C or G

<400> 1750

```
aggccagcct ccaccacgca cggcgaaagg agtgaactag ctggggacaca cacacgtgtg 60
aatgcatgca agcattcact gcattcttctc cgtggactcc ctaccgctct tccatagccc 120
cccctttcag cctcactgtt tctcgtgtga gcctatctgc ttgggcagtc cactcgggag 180
ggggtcatgg agccaggact ccctctaaat aggaatggaa aggaccctgc agatattttt 240
atcctanttg tgaaaacaag gtgcctctga ttctctatat ccatcacag 289
```

<210> 1751

<211> 594

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 558

<223> n = A,T,C or G

<400> 1751

```
ctggttatta atcacaagtc ctggaaatgg tctaatagacc gtgaatttga taaactcggc 60
agagtctaag atccttctca tggagctgat ttccaggtag ctgggggctt tgaaggacac 120
```

```

ccccgggggc atgccatcaa ccaccacaca gccagggtta attgtgattt tcctgtaggg 180
aactttcaca ggaaaaccca taccaatagc ttcaccaa at tccgactaa agaggtcatt 240
cacttgttct cttagctgtc tagctttttc aactttcgag agtctttcat tatcatcatc 300
tggaattgtc acctgaatga tgtaagggtc ttcaacacct gatgcagtag tattaacatt 360
gggtgatgaa tttatttttc tgggagggtc cttagaggag gtgctctcct taatcgccgt 420
ctcaaacatt tcgggctttt taatgatgaa ctttaattttg gctttgtttc tgagtatctt 480
ctccagcctc ggaatgccaa aagtcgatgg tcttcggaat ggcacaccct caggtaagcc 540
ttccacataa aagtcttncg ggaaagactc aaataacgcg aacggcacct tcac 594

```

```

<210> 1752
<211> 311
<212> DNA
<213> Homo sapiens

```

```

<400> 1752
ctgaagggtt catggctccc aaggcttggg ccgtgctgac agaatactac aaatccttgg 60
agaaagctta ggctgttaac ccagtcactc cacctttgac acattactag taacaagagg 120
ggaccacata gtctctgttg gcattttctt gtggtgtctg tctggacatg cttcctaaaa 180
acagaccatt ttccttaact tgcattcagtt ttggtctgcc ttatgagttc tgttttgaac 240
aagtgttaaca cactgatggg tttaatgtat cttttccact tattatagtt atattcctac 300
aatacaattt t 311

```

```

<210> 1753
<211> 587
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 552, 561
<223> n = A,T,C or G

```

```

<400> 1753
ctgtccatta tacaccgtca cgttgatccc tgcctccagc aactcgtcca caatgctaata 60
gactggcttc atgaagtcct cctccatggt caciaagacg ttggtagcct ggctcccca 120
ggattgatcc tcaggaataa ttttgagctt ctttctgatg gggccattca tgagctggct 180
taaggcatct cgttgtagggt gtctcacgtg gcgctgacaa agacaaacta ggtggctctg 240
tgtgaattct agactcgact ccattgtaga cgtgggagtg cttttagtta agatggtata 300
gaagttcacc ccattctgtgt tctgttcaat gatcatttct gctttccccc acagctctgt 360
ggcctctctg tagagcccct tatttacggc attcagtact tgctctgcaa ccttagacac 420
ctctgccaga cctttgtctt cgagaagaga catgctgtac aggtaagggt cccaggagag 480
caccgaatca acaggggaga tccaggaatc acccaaggca acccccgcaa agttgcactt 540
gatggctcct cnetgaatgg ncttataaag ctctagacca atgccag 587

```

```

<210> 1754
<211> 564
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 409
<223> n = A,T,C or G

```

<400> 1754

```

cctctctcct  tggcttgcag  gtggcacctt  ctcactatgt  cctcacatgg  ccttttctct  60
gtggagaggg  acagagagca  tgagcaggct  ctggtgtctc  ctcttcttat  aaagacacta  120
atatcaccat  attagggctt  aaacctatga  cctcatttaa  ccttaacccc  ttaaagggtcc  180
catctccaaa  aacagtcaca  tagcaggcta  ctgcttcaac  atatgcattt  gggggagggg  240
acaccattca  gttcttaaca  ggggtggcac  cgcaaacatg  gaaagtcaga  gccttctccc  300
cttcagaatt  cccgccccca  cccagggatg  gggaagagga  gcagagaggt  atgggaagca  360
gacacggaga  gtggcaggta  ccatgctggg  gtggctcagg  agtgcttcng  aggacatatg  420
gaactggcag  ggctcagtgc  agggaggcgg  aggccctggg  agagccgtgt  cctgagaagg  480
gcctgggcta  caaccctggg  caagttactt  cacctctgag  cctccgatgc  tctgtgaaat  540
ggaaggaatg  tgcttgctg  tcag                                     564

```

<210> 1755

<211> 214

<212> DNA

<213> Homo sapiens

<400> 1755

```

aaatgtgatg  ttttgagcat  caaaaagcta  ctatctaaaa  ggattagtct  cccagtgttc  60
ttggtaaagt  ggaaggtta  ggaaggaggc  aatgatccaa  tgaatataga  agaactggcc  120
gattcacagg  aaacttgctt  tggataaggt  gagtcaatgg  gtgatattgt  gcaggcaggg  180
agggaaattt  ctttgtacaa  attcatgtcc  ctgg                                     214

```

<210> 1756

<211> 225

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 8, 9, 40, 41, 76, 88, 89, 91, 100, 143, 181, 188, 197, 201, 202, 217

<223> n = A,T,C or G

<400> 1756

```

aaaattanna  catacatggt  caggcagctt  ctgtccatan  ntaaaactatt  ccttttcagt  60
ctgagtaata  tgcggnttgt  tcttaatnnc  ncacattaan  aatttattta  gattgggtgaa  120
actatcttta  taiaaaaaaaaa  atncgaacat  gaatgcaaac  ttaccaaaca  gagcccacta  180
nattgatnaa  gttaatncca  nnatagtttg  ccatganctg  ggtgg                                     225

```

<210> 1757

<211> 282

<212> DNA

<213> Homo sapiens

<400> 1757

```

ttgcagcctg  cgatgacaca  gcgaatctat  gacaagttta  tagctcagtt  gcagacatct  60
atccgggagg  aaatctctga  catcaaagag  gaggggaacc  tagaagctgt  cttgaatgcc  120
ttggataaaa  ttgtggaaga  aggcaaagtc  cgcaaagagc  cagcctggcg  ccccagcggg  180
atcccagaga  aggatctgca  cagtgttatg  gcaccctact  tcctgcagca  acgggacacc  240
ctgcggcgcc  atgtgcagaa  acaggaggcc  gagaaccagc  ag                                     282

```

<210> 1758

<211> 473

<212> DNA
<213> Homo sapiens

<400> 1758

```
ctgaaacagc ttttcaagct ctctctcctc gtcaaggatc atgagaggca ctccactcaa 60
ggggaggtgc gcaatctggt gctcttcagg caggtcaaaa ctctcaaagt ctagaggatt 120
gaagggaag aatTTTTtcta tttctggata ggcatcatct gaggcaggaa cagagctttt 180
tgctttaaca gtcttctcag tcatcttttt ggagaaaag cttggctgtt tttgtttgag 240
gggtcccttg gtctttacag acttttctgt agctctgttg acagttccca aagcctttct 300
agtagcttta ggtaaggctg gtggggcatc gaacgttttg ccaaaacgtg gtgttgaaac 360
ttgagatctc ccatctaagg ctttgattga aggtccagac cccagcttca gcccatcctt 420
agcaaccaca cgggtgcctg gttctccatt ttccttatcg acatagatca gag 473
```

<210> 1759

<211> 187

<212> DNA

<213> Homo sapiens

<400> 1759

```
aaacttcgcc atgatcgtgt cttctgcact catgatatgg aaaggcttga tcgtgctcac 60
aggcagttag agcccatcgc tgggtggtgct gagtggcagt atggagccgg cctttcacag 120
aggagacctc ctgttcctca caaatttccg ggaagaccca atcagagctg gtgaaatagt 180
tgTTTTT
```

<210> 1760

<211> 564

<212> DNA

<213> Homo sapiens

<400> 1760

```
cctctctcct tggcttgagc gtggcacctt ctactatgt cctcacacgg ccttttctct 60
gtggagaggg acagagagca tgagcaggct ctggtgtctc ctcttcttat aaagacacta 120
atatcaccat attagggctt aaacctatga cctcatttaa ccttaacccc ttaaagggtcc 180
catctccaaa aacagtcaca tagcaggcta ctgcttcaac atatgcattt gggggagggg 240
acaccattca gttcttaaca ggggtggcac cgcaaacatg gaaagtcaga gccttctccc 300
cttcagaatt cccgccccca cccagggatg gggaagagga gcagagaggt atgggaagca 360
gacacggaga gtggcaggta ccatgctggg gtggctcagg agtgcttcgg aggacatatg 420
gaactggcag ggctcagtgc agggaggcgg aggccttggg agagccgtgt cctgagaagg 480
gcctgggcta caaccctggg caagttactt cacctctgag cctccgatgc tctgtgaaat 540
ggaaggaatg tgcttgctg tcag 564
```

<210> 1761

<211> 413

<212> DNA

<213> Homo sapiens

<400> 1761

```
ctgtcttctc atctatctta gcataggagt cctctgctgc cttttcaata ccgtcgtggg 60
atttctccaa agcagttttc aagtttagaa atatttcctg ggacttcagt ttctcccttt 120
cagcagcatc ttttagttgt tgaattccaa gtttaatttt ttggatttct tgattaattg 180
tggttactcg ttcatagaca gcacctcttt tttcttgaac tttattgcaa tcttcaatta 240
ctgtgcgttt gtattgctta acatcttcat gcttcttatt tattttgaat tgtgctgtgg 300
caagtttttc cttcttcaca atcatcagtc ttttgaacga attttcttca gtcttcaatt 360
tcttcagttc tgactcatca ctctcaattt ggtcctccaa gttcaggctt ctg 413
```

<210> 1762
 <211> 315
 <212> DNA
 <213> Homo sapiens

<400> 1762
 ggaaaagaaa gagctgaaaa tgcagaaagc cgaagagtta gaacttttgg atacaggaga 60
 agaaacagcg gctccactac agaccagcc ccagggtcaa tgtcctccga agaatgaagt 120
 ctttccttg tcatgggtccc ctgccctgtc tttccagcat ccactctccc ttgtcctcct 180
 gggggcatat ctcatgcagg cagcggcttc ctgatgatgg tcgttggggg ggttgtcatg 240
 tgatgggtcc cctccagggt actaaagggt gcatgtcccc tgcttgaaca ctgaagggca 300
 ggtggtgggc catgg 315

<210> 1763
 <211> 114
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 16
 <223> n = A,T,C or G

<400> 1763
 cgaccgccta agagtngcgc tgtaagaagc aacaacctct cctcttcgtc tccgccatca 60
 gctcggcagt cgcgaagcag caaccatgcg tgagtgcac tccatccacg ttgg 114

<210> 1764
 <211> 114
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 25, 33, 38, 53, 62, 71, 81, 83, 93, 102
 <223> n = A,T,C or G

<400> 1764
 ctaatacgac tcactatacg gctcnagcgg cctccgngc cgggggctgc tcnggttaga 60
 tngacatgaa naccctacag ntnccactgt ggnaattgaa antatccctc atgt 114

<210> 1765
 <211> 485
 <212> DNA
 <213> Homo sapiens

<400> 1765
 aaacagtaac aaaacagaaa gcaagaatca ctgaacactg ggtgcagtca gttctaagtc 60
 cttataataa ttgccaaaat tatttgaatg attcttcaag attaggctga tccctggcta 120
 aggtctgtgt aaggcagaca agcgttattg atcatatcaa gttccctaca atatcctgtc 180
 ctcaaaaccg gaagcaatga acatgatcct ctctcggttg ataatgaac ttctgtttg 240
 gcctgcttct aggccctgcc agattctcat aacatcatat acgtaagtat agttcctcaa 300
 agtgactgac atttatttta attttgcttt gttttttttt attttctccc ccattccttt 360

atTTTgtgtt attcctgact cacttgacac tctctgatgc ctgagagatt cctgtttggg 420
 atttaatatc cagggtgtg tttacagtaa aaaaagcagg cagtccttt tagtttttcc 480
 ttttt 485

<210> 1766
 <211> 389
 <212> DNA
 <213> Homo sapiens

<400> 1766
 aaaaacaaag tcttcaactt ggggtgtgag attggcaaaa ggggaagcaa gggaaaagcc 60
 aaggaaagat aaaatattca gaagaaagtc aaagttatct gcaattacat gttagaacag 120
 atTTTgcagg ttaaaaagat gttgcttaaa tatattcata aacctgttgt aagattttca 180
 cttatgcagt ttcagaaaat ttagctgctt aacatatgac agaactgtat tttacaaaat 240
 gacattaaaa gtcaggagag ctactcagtt aattgataaa gtagaggcaa cgtgggggag 300
 ccctcccccac gtttattgaa gatttgtggc tccccagcc ccgtttgcct gcatcaggct 360
 aacaacctca ttcctcccat agagcctgg 389

<210> 1767
 <211> 176
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 16, 20, 21, 35, 119, 125, 133, 142, 165, 169, 176
 <223> n = A,T,C or G

<400> 1767
 tttttcaacg attaanaatn ntcattacat aactnggtga aactgaaaaa gtatatcata 60
 tgggtacaca aggctatttg ccagcgtata ttaatatTTT agaaaatatt ctttttgtna 120
 tactnaatat cancatagag cnagaatcat attatcatac ttatnatant gttcan 176

<210> 1768
 <211> 384
 <212> DNA
 <213> Homo sapiens

<400> 1768
 aaaagaaatc atggtacttc ttagagcaat ttgcaaaagg ggaaaaaagt cttaggctca 60
 ctcccttgaa ataaatatca agtaaccata aaaatattca gccatttttc agttattcgg 120
 ggagttcagg catggtccca cgcagagcat cagagttcct ctttgaaata acccagcttt 180
 gccaatgaca tctcttttct caactgcata acctcccaaa acatctgac aacatcctgc 240
 tgtttcacaa gtccctgctg aatgtatcga atgtatgtaa aaaagttaca tacagaagtg 300
 atcctgtatc tgcaaaaagg agaaatacaa taatagttgc ttgagtcctc taatttaatt 360
 ctgtgttttac aggacttact ctgg 384

<210> 1769
 <211> 111
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature

<222> 91

<223> n = A,T,C or G

<400> 1769

```
aaatataaaa aattaaaagt taaaactcta gcccttcagt gaaggagacg taaaatggcg 60
tgggtaacaa caactaccaa aaaaaaaaaa naaaaaaaaa aaaaaaaaaa a 111
```

<210> 1770

<211> 225

<212> DNA

<213> Homo sapiens

<400> 1770

```
ctggctgaag gggccgtgga gctcccgccca gcccacgatt agctgggcct tcttcggggcc 60
aatgcgctga agactgcgga gatctcgggc tgagccttcg ttcagcagat ccagtatttt 120
ttggcgccca tgagccagta gctccggggct gatctgtagc tcccagcagt cctcagcctt 180
ctcctcaggc tctagggcat ccagggactc cagctttctc ttccg 225
```

<210> 1771

<211> 223

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 39

<223> n = A,T,C or G

<400> 1771

```
ggccaagtaa aagctttatt tttttaaatg aaaactacna aaggcgggggt gggttgtggc 60
gggggcaagt tgtggccctg taggaccttc ggtgactgat gatctaagtt tccggagggt 120
tctcagagcc tctctgggtc tttcaatcgg ggatgtctga gggaccttcc gcggcatcta 180
tgcgggcatg gttactgcct ctggtgcccc ccgcagccgc gcg 223
```

<210> 1772

<211> 419

<212> DNA

<213> Homo sapiens

<400> 1772

```
ccaagtctac aatgtcccaa tatcaaggac aaccacccta gcttcttagt gaagacaatg 60
tacagttatc cattagatca agactacacg gtctatgagc aataatgtga tttctggaca 120
ttgcccatgt ataatcctca ctgatgattt caagctaaag caaaccacct tatacagaga 180
tctagaatct ctttatgttc tccagaggaa ggtggaagaa accatgggca ggagtaggaa 240
ttgagtgata aacaattggg ctaatgaaga aaacttctct tattgttcag ttcattccaga 300
ttataacttc aatgggacac tttagaccat tagacaattg aactggatt aaacaaattc 360
acataatgcc aaatacacia tgtatttata gcaacgtata atttgcaaag atggacttt 419
```

<210> 1773

<211> 172

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature
 <222> 3, 42, 66, 68, 77, 85, 104, 140
 <223> n = A,T,C or G

<400> 1773

```

cgngcggctg cgggggggcac cagaggcagt ataccatgcc cncatagatg ccgcggaagg 60
tccctnanac atcccnatt gaaanaacca ttagaggctc tganaaacct acggaaactt 120
agatcatcag gtcaccgaan agtcctacag ggccacaaca tgccccctgc ac 172

```

<210> 1774

<211> 525

<212> DNA

<213> Homo sapiens

<400> 1774

```

ccttcaactct cccctgaggc tgtcctggcc cggactgtgg ggagcacctc cccccccgg 60
agcaggtgca caccaggtta agcaggtcca ggggctgggg tgggcagggc tagcttttgg 120
atcctgagtg tcaactactct ctccctccag ggatgccctg gacctaaagt acatcaactc 180
agagcctcct cggggctcct tccctcctt tgagcctcgg aacctcctca gcctgtttga 240
ggacacccta gacccaacct gagccccaga ctctgcctct gcacttttaa ctttttatcc 300
tgtgtctctc ccgtcgcctt tgaaagctgg ggccccctcg gaactcccat ggtcttctct 360
gcctggccgt gtctaataaa aagtatttga accttgggag caccaagct tgetcatgtg 420
gcaacatggc ctttcttggg ccttttattg atgtcatcca ggtctttaac gccctgagg 480
ctgagccctg ctgcagaacc cacgctcctg gccttggggc agcag 525

```

<210> 1775

<211> 458

<212> DNA

<213> Homo sapiens

<400> 1775

```

aaattttcta gtcaaattaa taagcctttg tattatatgc catcctcctt tggaatgata 60
gcggtataat taaaatagaa catttttaac acagaatact tattggtgaa gtggtctctt 120
atgtagtctt cttttgacga gaacgttgag attttcgaac tttcagaact ttcttttttt 180
gatgtttttt cccattcttt tgctttttct tttggctgac ctgtttctcc cactttttta 240
tcagttcctt cacatctgct gaatctgggt ttagacatgt ttgaactcca ttcttcagt 300
tagcaatgat ttcaattttc tcgcaggaag ggcttggggc aaattgttta aggtctttca 360
aggattgtag gtggatagtc ccttggtttg tgctgatgca ggaacagcga ccctttctca 420
ctactggggg tccttgccact ccaatcagaa ccagcaag 458

```

<210> 1776

<211> 461

<212> DNA

<213> Homo sapiens

<400> 1776

```

aaagtttcac ttccctagca aaatatcttc agtcaagaaa ttagtctttg aaaattatga 60
aaattgttgt gggaaatatt tatacaaatt attactgata atgcacatat attttgaaac 120
attgtttcta gaagcaataa aatataacct atttaggaga taacccaaat gatttgtaaa 180
aaaattaact tgtagaaaag ggaaggatgt tgtgtaaaat caagtcaatt atttgagggt 240
tttataatat tgagtactta tgtactaagt cacaccagc cagtcaataa ctgagaaatc 300
aaaataaaat aataatttca aagaattaca taaatacagg gccttttgag atttttggca 360
attgtaaaca aaaacgaatg gtttttaciaa ttcagtgtaa ttctacgaat atttatttgg 420
cacccatggt aggcactgag gctacacagc agtgaaatag g 461

```


<210> 1777
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 1777
 ccaagttctg ctggaggagc actcaagtgt gacgagcagg gccactggac cctgcagggc 60
 tgtggtgtat atagtgcagc tttggagggtg gaactctatt ttcacacttt tctatggagc 120
 cttccgagtc ccagggttttc acttgaggct gtctgtcttg atggcgggtt tcagacctcc 180
 attaaccatcc ctaccagca ttctgtactt cgggggcctt ctctcttgtt ataaaacttt 240
 ttaccaagtg aaacatcgat accacctttg ttccattct cactggtgta aatactgagt 300
 actaactgag aattttgact ttgcattctg tcggaatact tgtgttcaat aaaaattgaa 360
 agaaaaaa 368

<210> 1778
 <211> 554
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 211, 416, 499, 518
 <223> n = A,T,C or G

<400> 1778
 cagttatgcg aaaacatggc tgcggccggt ttggcccttc tttgtaggag agtttcatcc 60
 gccctgaaat cttcccgatc gttaataact cctcagggtcc ctgcctgcac agggtttttt 120
 cttagtttgt tgcctaagag tacaccaaat gtgacatcct ttcaccaata tagattactt 180
 cataccacat tgtcaaggaa aggactagaa naattttttg atgacccaaa aaactggggg 240
 caagaaaaag taaaatctgg agcagcatgg acctgtcagc aactaaggaa caaaagtaat 300
 gaagatttac acaaactttg gtatgtctta ctgaaagaaa gaaacatgct tctaacccta 360
 gagcaggagg ccaagcggca gagattgccca atgccaaagtc cagagcgggt agatanggt 420
 gtagattcca tggatgcatt agataaagtgt gtccagggaa agagaagatg ccctaaggct 480
 tcttcagact ggtcaagana gagctagacc tgggtgctntg gagaaagaag acatcttttg 540
 aaagaatcat ctgg 554

<210> 1779
 <211> 379
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 42, 378
 <223> n = A,T,C or G

<400> 1779
 gtcttggctg ggcattgacaa ccgcgtcagc tgcctgggag tnactgacga tggcatggct 60
 gtggcgacag ggtcctggga tagcttcttc aagatctgga actaacgcca gtagcatgtg 120
 gatgccatgg agactggaag accattccaa cttggacgag ttaccatgag agcatatcct 180
 atccaaccgt actaacgtgg acaccctaca cctcccctca gaacttcaaa agggcaagat 240
 cttttttcct tcaattattg ctgagaccaa gagcacaatt cccattgaga gaaagatctc 300
 tgtgctgtaa actaaaacaa attgtgcatt ccttccgggg ccatcgtctt tgtcttcttt 360

tttgtcttga atgaattnt

379

<210> 1780

<211> 222

<212> DNA

<213> Homo sapiens

<400> 1780

ctggttaattg	cagaatccac	tttgcctgtg	taagtgaaaa	atatagactg	ttatcttggt	60
ggccctatga	aattctgcac	ttttcattat	atactctacc	ttcattaatt	acttctggca	120
agatgttctg	ccttagcact	cagttgcatt	cttttccttt	ttcttcctgt	tcattatgct	180
ttaattctga	ggaccatatg	agggtagaat	atattatctt	tt		222

<210> 1781

<211> 292

<212> DNA

<213> Homo sapiens

<400> 1781

ctgctggagc	aagccctgcg	gaagcacaac	gtggctgagc	cgtgttccat	caaagtcctt	60
gacaaggcta	cggtaccaat	aataaagctc	acagatcagg	agactgaagt	gaaagttgac	120
atcagcttta	acatggagac	gggcgtccgg	gcagcggagt	tcatacaaga	ttacatgaag	180
aaatattcat	tgctgcctta	cttgatttta	gtattgaaac	agttccttct	gcagagggac	240
ctgaatgaag	tttttacagg	tggaattagc	tcatacagcc	taattttaat	gg	292

<210> 1782

<211> 381

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 132

<223> n = A,T,C or G

<400> 1782

aaaacctgga	cctttctgga	agggcagcat	ataaaaacat	cagtccccgag	gaggggacaa	60
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<210> 1783

<211> 127

<212> DNA

<213> Homo sapiens

<400> 1783

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<210> 1784
 <211> 259
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<400> 1784
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<210> 1785
 <211> 400
 <212> DNA
 <213> Homo sapiens

<400> 1785
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<210> 1786
 <211> 372
 <212> DNA
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<220>
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 <222> 239
 <223> n = A,T,C or G

<400> 1786
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<210> 1787
 <211> 86
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> 22
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<400> 1787

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<210> 1788

<211> 354

<212> DNA

<213> Homo sapiens

<400> 1788

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gcatcctagc agccttctcc aaagccacat cctagtatca gaaggccagg cgagactgca 180
aactgctca tcaccccgcg gcgtgatccc tgctcttagg tgctgggcag aggggaagg 240
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<210> 1789

<211> 651

<212> DNA

<213> Homo sapiens

<400> 1789

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<210> 1790

<211> 388

<212> DNA

<213> Homo sapiens

<400> 1790

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caagatctat cacagccatc ttttggag 388

<210> 1791

<211> 2442

<212> DNA

<213> Homo sapiens

<400> 1791

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<210> 1792

<211> 2279

<212> DNA

<213> Homo sapiens

<400> 1792

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<210> 1793

<211> 1904

<212> DNA

<213> Homo sapiens

<400> 1793

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<210> 1794

<211> 2881

<212> DNA

<213> Homo sapiens

<400> 1794

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<210> 1795

<211> 422

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 295, 378, 390

<223> n = A,T,C or G

<400> 1795

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<212> DNA

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<400> 1796

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<210> 1797

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<212> DNA

<213> Homo sapiens

<400> 1798

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<211> 2036

<212> DNA

<213> Homo sapiens

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<211> 2842

<212> DNA

<213> Homo sapiens

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<210> 1801

<211> 4086

<212> DNA

<213> Homo sapiens

<400> 1801

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gttggaagag aatcacctgg gaaaatacca gaaaatgagg gccgctttga gtccccaga 720
gatgtcatca gagctcctct gtcctgcttc tgaatgtgct gatcatttga ggaataaaat 780
tatttttccc c 791

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<210> 1806
<211> 255
<212> PRT
<213> Homo sapiens

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<400> 1806

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Met	Val	Ile	Ala	Leu	Leu	Gly	Val	Trp	Thr	Ser	Val	Ala	Val	Val	Trp
1				5					10					15	
Phe	Asp	Leu	Val	Asp	Tyr	Glu	Glu	Val	Leu	Gly	Lys	Leu	Gly	Ile	Tyr
			20					25					30		
Asp	Ala	Asp	Gly	Asp	Gly	Asp	Phe	Asp	Val	Asp	Asp	Ala	Lys	Val	Leu
		35					40					45			
Leu	Gly	Leu	Lys	Glu	Arg	Ser	Thr	Ser	Glu	Pro	Ala	Val	Pro	Pro	Glu
	50					55					60				
Glu	Ala	Glu	Pro	His	Thr	Glu	Pro	Glu	Glu	Gln	Val	Pro	Val	Glu	Ala
65					70					75					80
Glu	Pro	Gln	Asn	Ile	Glu	Asp	Glu	Ala	Lys	Glu	Gln	Ile	Gln	Ser	Leu
			85						90					95	
Leu	His	Glu	Met	Val	His	Ala	Glu	His	Val	Glu	Gly	Glu	Asp	Leu	Gln
			100						105				110		
Gln	Glu	Asp	Gly	Pro	Thr	Gly	Glu	Pro	Gln	Gln	Glu	Asp	Asp	Glu	Phe
		115					120					125			
Leu	Met	Ala	Thr	Asp	Val	Asp	Asp	Arg	Phe	Glu	Thr	Leu	Glu	Leu	Glu
	130					135					140				
Val	Ser	His	Glu	Glu	Thr	Glu	His	Ser	Tyr	His	Val	Glu	Glu	Thr	Val
145					150					155					160
Ser	Gln	Asp	Cys	Asn	Gln	Asp	Met	Glu	Glu	Met	Met	Ser	Glu	Gln	Glu
			165						170					175	
Asn	Pro	Asp	Ser	Ser	Glu	Pro	Val	Val	Glu	Asp	Glu	Arg	Leu	His	His
		180						185					190		
Asp	Thr	Asp	Asp	Val	Thr	Tyr	Gln	Val	Tyr	Glu	Glu	Gln	Ala	Val	Tyr
		195					200					205			
Glu	Pro	Leu	Glu	Asn	Glu	Gly	Ile	Glu	Ile	Thr	Glu	Val	Thr	Val	Pro
	210					215					220				
Pro	Glu	Asp	Asn	Pro	Val	Glu	Asp	Ser	Gln	Val	Ile	Val	Glu	Glu	Val
225					230					235					240
Ser	Ile	Phe	Pro	Val	Glu	Glu	Gln	Gln	Glu	Val	Pro	Pro	Asp	Thr	
			245						250					255	

<210> 1807

<211> 226

<212> PRT

<213> Homo sapiens

<400> 1807

Met	Pro	Leu	Ser	Gln	Ile	Lys	Lys	Val	Leu	Asp	Ile	Arg	Glu	Thr	Glu
1				5					10					15	
Asp	Cys	His	Asn	Ala	Phe	Ala	Leu	Leu	Val	Arg	Pro	Pro	Thr	Glu	Gln
			20					25					30		
Ala	Asn	Val	Leu	Leu	Ser	Phe	Gln	Met	Thr	Ser	Asp	Glu	Leu	Pro	Lys
		35					40					45			
Glu	Asn	Trp	Leu	Lys	Met	Leu	Cys	Arg	His	Val	Ala	Asn	Thr	Ile	Cys
	50					55					60				
Lys	Ala	Asp	Ala	Glu	Asn	Leu	Ile	Tyr	Thr	Ala	Asp	Pro	Glu	Ser	Phe
65					70					75					80
Glu	Val	Asn	Thr	Lys	Asp	Met	Asp	Ser	Thr	Leu	Ser	Arg	Ala	Ser	Arg
			85						90					95	
Ala	Ile	Lys	Lys	Thr	Ser	Lys	Lys	Val	Thr	Arg	Ala	Phe	Ser	Phe	Ser
			100					105					110		

Lys Thr Pro Lys Arg Ala Leu Arg Arg Ala Leu Met Thr Ser His Gly
 115 120 125
 Ser Val Glu Gly Arg Ser Pro Ser Ser Asn Asp Lys His Val Met Ser
 130 135 140
 Arg Leu Ser Ser Thr Ser Ser Leu Ala Ile Thr His Ser Val Ser Thr
 145 150 155 160
 Ser Asn Val Ile Gly Phe Thr Lys His Val Tyr Val Gln Arg Leu Asn
 165 170 175
 Ser Thr Gly Gly Arg Ser Gln Tyr Ser Trp Phe Gln Ser Val Arg His
 180 185 190
 Ser Ala Phe Arg Ala Ser Phe Ser Glu Ile Leu Glu Gly Asn Thr Asp
 195 200 205
 Phe Ser Asn Phe Lys Lys Val Leu Ser Lys Ser Ser Leu Thr Phe Val
 210 215 220
 Lys Asn
 225

<210> 1808
 <211> 52
 <212> PRT
 <213> Homo sapiens

<400> 1808
 Met Ser Val Phe Val Leu Phe Pro Asp Phe Phe Lys Val Gly Lys Thr
 1 5 10 15
 Thr Tyr Phe Tyr Leu Asp Glu Gly Ser Gly Arg Val Glu Gln Lys Gln
 20 25 30
 Ala Ile Thr Ala Ile Ser Ser Ser Phe Thr Gly Asp Cys Pro Leu Ile
 35 40 45
 Ala Asn Val Glu
 50

<210> 1809
 <211> 592
 <212> PRT
 <213> Homo sapiens

<400> 1809
 Met Ala Ser Glu Ile His Met Thr Gly Pro Met Cys Leu Ile Glu Asn
 1 5 10 15
 Thr Asn Gly Arg Leu Met Ala Asn Pro Glu Ala Leu Lys Ile Leu Ser
 20 25 30
 Ala Ile Thr Gln Pro Met Val Val Val Ala Ile Val Gly Leu Tyr Arg
 35 40 45
 Thr Gly Lys Ser Tyr Leu Met Asn Lys Leu Ala Gly Lys Lys Lys Gly
 50 55 60
 Phe Ser Leu Gly Ser Thr Val Gln Ser His Thr Lys Gly Ile Trp Met
 65 70 75 80
 Trp Cys Val Pro His Pro Lys Lys Pro Gly His Ile Leu Val Leu Leu
 85 90 95
 Asp Thr Glu Gly Leu Gly Asp Val Glu Lys Gly Asp Asn Gln Asn Asp
 100 105 110

Ser	Trp	Ile	Phe	Ala	Leu	Ala	Val	Leu	Leu	Ser	Ser	Thr	Phe	Val	Tyr
		115					120					125			
Asn	Ser	Ile	Gly	Thr	Ile	Asn	Gln	Gln	Ala	Met	Asp	Gln	Leu	Tyr	Tyr
	130					135					140				
Val	Thr	Glu	Leu	Thr	His	Arg	Ile	Arg	Ser	Lys	Ser	Ser	Pro	Asp	Glu
145					150					155					160
Asn	Glu	Asn	Glu	Val	Glu	Asp	Ser	Ala	Asp	Phe	Val	Ser	Phe	Phe	Pro
				165					170					175	
Asp	Phe	Val	Trp	Thr	Leu	Arg	Asp	Phe	Ser	Leu	Asp	Leu	Glu	Ala	Asp
			180					185					190		
Gly	Gln	Pro	Leu	Thr	Pro	Asp	Glu	Tyr	Leu	Thr	Tyr	Ser	Leu	Lys	Leu
		195					200					205			
Lys	Lys	Gly	Thr	Ser	Gln	Lys	Asp	Glu	Thr	Phe	Asn	Leu	Pro	Arg	Leu
	210					215					220				
Cys	Ile	Arg	Lys	Phe	Phe	Pro	Lys	Lys	Lys	Cys	Phe	Val	Phe	Asp	Arg
225					230					235					240
Pro	Val	His	Arg	Arg	Lys	Leu	Ala	Gln	Leu	Glu	Lys	Leu	Gln	Asp	Glu
				245					250					255	
Glu	Leu	Asp	Pro	Glu	Phe	Val	Gln	Gln	Val	Ala	Asp	Phe	Cys	Ser	Tyr
			260					265					270		
Ile	Phe	Ser	Asn	Ser	Lys	Thr	Lys	Thr	Leu	Ser	Gly	Gly	Ile	Gln	Val
		275					280					285			
Asn	Gly	Pro	Arg	Leu	Glu	Ser	Leu	Val	Leu	Thr	Tyr	Val	Asn	Ala	Ile
	290					295					300				
Ser	Ser	Gly	Asp	Leu	Pro	Cys	Met	Glu	Asn	Ala	Val	Leu	Ala	Leu	Ala
305					310					315					320
Gln	Ile	Glu	Asn	Ser	Ala	Ala	Val	Gln	Lys	Ala	Ile	Ala	His	Tyr	Glu
				325					330					335	
Gln	Gln	Met	Gly	Gln	Lys	Val	Gln	Leu	Pro	Thr	Glu	Ser	Leu	Gln	Glu
			340					345					350		
Leu	Leu	Asp	Leu	His	Arg	Asp	Ser	Glu	Arg	Glu	Ala	Ile	Glu	Val	Phe
		355					360					365			
Ile	Arg	Ser	Ser	Phe	Lys	Asp	Val	Asp	His	Leu	Phe	Gln	Lys	Glu	Leu
	370					375					380				
Ala	Ala	Gln	Leu	Glu	Lys	Lys	Arg	Asp	Asp	Phe	Cys	Lys	Gln	Asn	Gln
385					390					395					400
Glu	Ala	Ser	Ser	Asp	Arg	Cys	Ser	Gly	Leu	Leu	Gln	Val	Ile	Phe	Ser
				405					410				415		
Pro	Leu	Glu	Glu	Glu	Val	Lys	Ala	Gly	Ile	Tyr	Ser	Lys	Pro	Gly	Gly
			420					425					430		
Tyr	Arg	Leu	Phe	Val	Gln	Lys	Leu	Gln	Asp	Leu	Lys	Lys	Lys	Tyr	Tyr
		435					440					445			
Glu	Glu	Pro	Arg	Lys	Gly	Ile	Gln	Ala	Glu	Glu	Ile	Leu	Gln	Thr	Tyr
	450					455					460				
Leu	Lys	Ser	Lys	Glu	Ser	Met	Thr	Asp	Ala	Ile	Leu	Gln	Thr	Asp	Gln
465					470					475					480
Thr	Leu	Thr	Glu	Lys	Glu	Lys	Glu	Ile	Glu	Val	Glu	Arg	Val	Lys	Ala
				485					490					495	
Glu	Ser	Ala	Gln	Ala	Ser	Ala	Lys	Met	Leu	Gln	Glu	Met	Gln	Arg	Lys
			500					505					510		
Asn	Glu	Gln	Met	Met	Glu	Gln	Lys	Glu	Arg	Ser	Tyr	Gln	Glu	His	Leu
		515					520					525			
Lys	Gln	Leu	Thr	Glu	Lys	Met	Glu	Asn	Asp	Arg	Val	Gln	Leu	Leu	Lys
	530					535					540				

Glu Gln Glu Arg Thr Leu Ala Leu Lys Leu Gln Glu Gln Glu Gln Leu
 545 550 555 560
 Leu Lys Glu Gly Phe Gln Lys Glu Ser Arg Ile Met Lys Asn Glu Ile
 565 570 575
 Gln Asp Leu Gln Thr Lys Met Arg Arg Arg Lys Ala Cys Thr Ile Ser
 580 585 590

<210> 1810
 <211> 57
 <212> PRT
 <213> Homo sapiens

<400> 1810
 Cys Phe Lys Ala Ser Gly Gln Ser Ser Ile Ser Phe Lys Thr Leu Phe
 1 5 10 15
 Phe Leu Lys Ala Tyr Ser Val Trp Leu Ile Leu Leu Pro Phe Leu Gln
 20 25 30
 Asp Gly Gly Arg Arg Val Asp Thr Gly Gly Arg Leu Arg Asp Thr Val
 35 40 45
 Thr Leu Arg Ser Leu Gln Ile Glu Val
 50 55

<210> 1811
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 1811
 Met Arg Gly Ser Glu Leu Pro Leu Val Leu Leu Ala Leu Val Leu Cys
 1 5 10 15
 Leu Ala Pro Arg Gly Arg Ala Val Pro Leu Pro Ala Gly Gly Gly Thr
 20 25 30
 Val Leu Thr Lys Met Tyr Pro Arg Gly Asn His Trp Ala Val Gly His
 35 40 45
 Leu Met Gly Lys Lys Ser Thr Gly Glu Ser Ser Ser Val Ser Glu Arg
 50 55 60
 Gly Ser Leu Lys Gln Gln Leu Arg Glu Tyr Ile Arg Trp Glu Glu Ala
 65 70 75 80
 Ala Arg Asn Leu Leu Gly Leu Ile Glu Ala Lys Glu Asn Arg Asn His
 85 90 95
 Gln Pro Pro Gln Pro Lys Ala Leu Gly Asn Gln Gln Pro Ser Trp Asp
 100 105 110
 Ser Glu Asp Ser Ser Asn Phe Lys Asp Val Gly Ser Lys Gly Lys Val
 115 120 125
 Gly Arg Leu Ser Ala Pro Gly Ser Gln Arg Glu Gly Arg Asn Pro Gln
 130 135 140
 Leu Asn Gln Gln
 145

<210> 1812
 <211> 474

<212> PRT

<213> Homo sapiens

<400> 1812

Met	Val	Gln	Gln	Thr	Asn	Asn	Ala	Glu	Asn	Thr	Glu	Ala	Leu	Leu	Ala	1	5	10	15
Gly	Glu	Ser	Ser	Asp	Ser	Gly	Ala	Gly	Leu	Glu	Leu	Gly	Ile	Ala	Ser	20	25	30	
Ser	Pro	Thr	Pro	Gly	Ser	Thr	Ala	Ser	Thr	Gly	Gly	Lys	Ala	Asp	Asp	35	40	45	
Pro	Ser	Trp	Cys	Lys	Thr	Pro	Ser	Gly	His	Ile	Lys	Arg	Pro	Met	Asn	50	55	60	
Ala	Phe	Met	Val	Trp	Ser	Gln	Ile	Glu	Arg	Arg	Lys	Ile	Met	Glu	Gln	65	70	75	80
Ser	Pro	Asp	Met	His	Asn	Ala	Glu	Ile	Ser	Lys	Arg	Leu	Gly	Lys	Arg	85	90	95	
Trp	Lys	Leu	Leu	Lys	Asp	Ser	Asp	Lys	Ile	Pro	Phe	Ile	Arg	Glu	Ala	100	105	110	
Glu	Arg	Leu	Arg	Leu	Lys	His	Met	Ala	Asp	Tyr	Pro	Asp	Tyr	Lys	Tyr	115	120	125	
Arg	Pro	Arg	Lys	Lys	Val	Lys	Ser	Gly	Asn	Ala	Asn	Ser	Ser	Ser	Ser	130	135	140	
Ala	Ala	Ala	Ser	Ser	Lys	Pro	Gly	Glu	Lys	Gly	Asp	Lys	Val	Gly	Gly	145	150	155	160
Ser	Gly	Gly	Gly	Gly	His	Gly	Gly	Gly	Gly	Gly	Gly	Gly	Ser	Ser	Asn	165	170	175	
Ala	Gly	Gly	Gly	Gly	Gly	Gly	Ala	Ser	Gly	Gly	Gly	Ala	Asn	Ser	Lys	180	185	190	
Pro	Ala	Gln	Lys	Lys	Ser	Cys	Gly	Ser	Lys	Val	Ala	Gly	Gly	Ala	Gly	195	200	205	
Gly	Gly	Val	Ser	Lys	Pro	His	Ala	Lys	Leu	Ile	Leu	Ala	Gly	Gly	Gly	210	215	220	
Gly	Gly	Gly	Lys	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ser	Phe	Ala	Ala	Glu	225	230	235	240
Gln	Ala	Gly	Ala	Ala	Ala	Leu	Leu	Pro	Leu	Gly	Ala	Ala	Ala	Asp	His	245	250	255	
His	Ser	Leu	Tyr	Lys	Ala	Arg	Thr	Pro	Ser	Ala	Ser	Ala	Ser	Ala	Ser	260	265	270	
Ser	Ala	Ala	Ser	Ala	Ser	Ala	Ala	Leu	Ala	Ala	Pro	Gly	Lys	His	Leu	275	280	285	
Ala	Glu	Lys	Lys	Val	Lys	Arg	Val	Tyr	Leu	Phe	Gly	Gly	Leu	Gly	Thr	290	295	300	
Ser	Ser	Ser	Pro	Val	Gly	Gly	Val	Gly	Ala	Gly	Ala	Asp	Pro	Ser	Asp	305	310	315	320
Pro	Leu	Gly	Leu	Tyr	Glu	Glu	Glu	Gly	Ala	Gly	Cys	Ser	Pro	Asp	Ala	325	330	335	
Pro	Ser	Leu	Ser	Gly	Arg	Ser	Ser	Ala	Ala	Ser	Ser	Pro	Ala	Ala	Gly	340	345	350	
Arg	Ser	Pro	Ala	Asp	His	Arg	Gly	Tyr	Ala	Ser	Leu	Arg	Ala	Ala	Ser	355	360	365	
Pro	Ala	Pro	Ser	Ser	Ala	Pro	Ser	His	Ala	Ser	Ser	Ser	Ala	Ser	Ser	370	375	380	
His	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Gly	Ser	Ser	Ser	Ser	Asp	Asp	Glu	385	390	395	400

Phe Glu Asp Asp Leu Leu Asp Leu Asn Pro Ser Ser Asn Phe Glu Ser
 405 410 415
 Met Ser Leu Gly Ser Phe Ser Ser Ser Ser Ala Leu Asp Arg Asp Leu
 420 425 430
 Asp Phe Asn Phe Glu Pro Gly Ser Gly Ser His Phe Glu Phe Pro Asp
 435 440 445
 Tyr Cys Thr Pro Glu Val Ser Glu Met Ile Ser Gly Asp Trp Leu Glu
 450 455 460
 Ser Ser Ile Ser Asn Leu Val Phe Thr Tyr
 465 470

<210> 1813

<211> 238

<212> PRT

<213> Homo sapiens

<400> 1813

Met Glu Ser Ser Ala Lys Met Glu Ser Gly Gly Ala Gly Gln Gln Pro
 1 5 10 15
 Gln Pro Gln Pro Gln Gln Pro Phe Leu Pro Pro Ala Ala Cys Phe Phe
 20 25 30
 Ala Thr Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Gln
 35 40 45
 Ser Ala Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
 50 55 60
 Ala Pro Gln Leu Arg Pro Ala Ala Asp Gly Gln Pro Ser Gly Gly Gly
 65 70 75 80
 His Lys Ser Ala Pro Lys Gln Val Lys Arg Gln Arg Ser Ser Ser Pro
 85 90 95
 Glu Leu Met Arg Cys Lys Arg Arg Leu Asn Phe Ser Gly Phe Gly Tyr
 100 105 110
 Ser Leu Pro Gln Gln Gln Pro Ala Ala Val Ala Arg Arg Asn Glu Arg
 115 120 125
 Glu Arg Asn Arg Val Lys Leu Val Asn Leu Gly Phe Ala Thr Leu Arg
 130 135 140
 Glu His Val Pro Asn Gly Ala Ala Asn Lys Lys Met Ser Lys Val Glu
 145 150 155 160
 Thr Leu Arg Ser Ala Val Glu Tyr Ile Arg Ala Leu Gln Gln Leu Leu
 165 170 175
 Asp Glu His Asp Ala Val Ser Ala Ala Phe Gln Ala Gly Val Leu Ser
 180 185 190
 Pro Thr Ile Ser Pro Asn Tyr Ser Asn Asp Leu Asn Ser Met Ala Gly
 195 200 205
 Ser Pro Val Ser Ser Tyr Ser Ser Asp Glu Gly Ser Tyr Asp Pro Leu
 210 215 220
 Ser Pro Glu Glu Gln Glu Leu Leu Asp Phe Thr Asn Trp Phe
 225 230 235

<210> 1814

<211> 68

<212> PRT

<213> Homo sapiens

<400> 1814

Met	Val	Tyr	Tyr	Pro	Glu	Leu	Phe	Val	Trp	Val	Ser	Gln	Glu	Pro	Phe
1				5					10					15	
Pro	Asn	Lys	Asp	Met	Glu	Gly	Arg	Leu	Pro	Lys	Gly	Arg	Leu	Pro	Val
			20					25					30		
Pro	Lys	Glu	Val	Asn	Arg	Lys	Lys	Asn	Asp	Glu	Thr	Asn	Ala	Ala	Ser
		35					40					45			
Leu	Thr	Pro	Leu	Gly	Ser	Ser	Glu	Leu	Arg	Ser	Pro	Arg	Ile	Ser	Tyr
	50					55					60				
Leu	His	Phe	Phe												
65															

<210> 1815

<211> 572

<212> PRT

<213> Homo sapiens

<400> 1815

Met	Ser	Tyr	Gln	Gly	Lys	Lys	Ser	Ile	Pro	His	Ile	Thr	Ser	Asp	Arg
1				5					10					15	
Leu	Leu	Ile	Lys	Gly	Gly	Arg	Ile	Ile	Asn	Asp	Asp	Gln	Ser	Leu	Tyr
			20					25					30		
Ala	Asp	Val	Tyr	Leu	Glu	Asp	Gly	Leu	Ile	Lys	Gln	Ile	Gly	Glu	Asn
		35					40					45			
Leu	Ile	Val	Pro	Gly	Gly	Val	Lys	Thr	Ile	Glu	Ala	Asn	Gly	Arg	Met
	50					55					60				
Val	Ile	Pro	Gly	Gly	Ile	Asp	Val	Asn	Thr	Tyr	Leu	Gln	Lys	Pro	Ser
65					70				75						80
Gln	Gly	Met	Thr	Ala	Ala	Asp	Asp	Phe	Phe	Gln	Gly	Thr	Arg	Ala	Ala
				85				90						95	
Leu	Val	Gly	Gly	Thr	Thr	Met	Ile	Ile	Asp	His	Val	Val	Pro	Glu	Pro
			100					105					110		
Gly	Ser	Ser	Leu	Leu	Thr	Ser	Phe	Glu	Lys	Trp	His	Glu	Ala	Ala	Asp
		115					120					125			
Thr	Lys	Ser	Cys	Cys	Asp	Tyr	Ser	Leu	His	Val	Asp	Ile	Thr	Ser	Trp
	130					135					140				
Tyr	Asp	Gly	Val	Arg	Glu	Glu	Leu	Glu	Val	Leu	Val	Gln	Asp	Lys	Gly
145					150					155					160
Val	Asn	Ser	Phe	Gln	Val	Tyr	Met	Ala	Tyr	Lys	Asp	Val	Tyr	Gln	Met
			165						170					175	
Ser	Asp	Ser	Gln	Leu	Tyr	Glu	Ala	Phe	Thr	Phe	Leu	Lys	Gly	Leu	Gly
			180					185					190		
Ala	Val	Ile	Leu	Val	His	Ala	Glu	Asn	Gly	Asp	Leu	Ile	Ala	Gln	Glu
		195					200					205			
Gln	Lys	Arg	Ile	Leu	Glu	Met	Gly	Ile	Thr	Gly	Pro	Glu	Gly	His	Ala
	210					215					220				
Leu	Ser	Arg	Pro	Glu	Glu	Leu	Glu	Ala	Glu	Ala	Val	Phe	Arg	Ala	Ile
225					230					235					240
Thr	Ile	Ala	Gly	Arg	Ile	Asn	Cys	Pro	Val	Tyr	Ile	Thr	Lys	Val	Met
			245						250					255	
Ser	Lys	Ser	Ala	Ala	Asp	Ile	Ile	Ala	Leu	Ala	Arg	Lys	Lys	Gly	Pro
			260					265					270		

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Leu Val Phe Gly Glu Pro Ile Ala Ala Ser Leu Gly Thr Asp Gly Thr
 275 280 285
 His Tyr Trp Ser Lys Asn Trp Ala Lys Ala Ala Phe Val Thr Ser
 290 295 300
 Pro Pro Leu Ser Pro Asp Pro Thr Thr Pro Asp Tyr Leu Thr Ser Leu
 305 310 315 320
 Leu Ala Cys Gly Asp Leu Gln Val Thr Gly Ser Gly His Cys Pro Tyr
 325 330 335
 Ser Thr Ala Gln Lys Ala Val Gly Lys Asp Asn Phe Thr Leu Ile Pro
 340 345 350
 Glu Gly Val Asn Gly Ile Glu Glu Arg Met Thr Val Val Trp Asp Lys
 355 360 365
 Ala Val Ala Thr Gly Lys Met Asp Glu Asn Gln Phe Val Ala Val Thr
 370 375 380
 Ser Thr Asn Ala Ala Lys Ile Phe Asn Leu Tyr Pro Arg Lys Gly Arg
 385 390 395 400
 Ile Ala Val Gly Ser Asp Ala Asp Val Val Ile Trp Asp Pro Asp Lys
 405 410 415
 Leu Lys Thr Ile Thr Ala Lys Ser His Lys Ser Ala Val Glu Tyr Asn
 420 425 430
 Ile Phe Glu Gly Met Glu Cys His Gly Ser Pro Leu Val Val Ile Ser
 435 440 445
 Gln Gly Lys Ile Val Phe Glu Asp Gly Asn Ile Asn Val Asn Lys Gly
 450 455 460
 Met Gly Arg Phe Ile Pro Arg Lys Ala Phe Pro Glu His Leu Tyr Gln
 465 470 475 480
 Arg Val Lys Ile Arg Asn Lys Val Phe Gly Leu Gln Gly Val Ser Arg
 485 490 495
 Gly Met Tyr Asp Gly Pro Val Tyr Glu Val Pro Ala Thr Pro Lys Tyr
 500 505 510
 Ala Thr Pro Ala Pro Ser Ala Lys Ser Ser Pro Ser Lys His Gln Pro
 515 520 525
 Pro Pro Ile Arg Asn Leu His Gln Ser Asn Phe Ser Leu Ser Gly Ala
 530 535 540
 Gln Ile Asp Asp Asn Asn Pro Arg Arg Thr Gly His Arg Ile Val Ala
 545 550 555 560
 Pro Pro Gly Gly Arg Ser Asn Ile Thr Ser Leu Gly
 565 570

<210> 1816
 <211> 325
 <212> PRT
 <213> Homo sapiens

<400> 1816
 Met Thr Glu Arg Arg Arg Asp Glu Leu Ser Glu Glu Ile Asn Asn Leu
 1 5 10 15
 Arg Glu Lys Val Met Lys Gln Ser Glu Glu Asn Asn Asn Leu Gln Ser
 20 25 30
 Gln Val Gln Lys Leu Thr Glu Glu Asn Thr Thr Leu Arg Glu Gln Val
 35 40 45
 Glu Pro Thr Pro Glu Asp Glu Asp Asp Asp Ile Glu Leu Arg Gly Ala
 50 55 60

Ala Ala Ala Ala Ala Pro Pro Pro Pro Ile Glu Glu Glu Cys Pro Glu
 65 70 75 80
 Asp Leu Pro Glu Lys Phe Asp Gly Asn Pro Asp Met Leu Ala Pro Phe
 85 90 95
 Met Ala Gln Cys Gln Ile Phe Met Glu Lys Ser Thr Arg Asp Phe Ser
 100 105 110
 Val Asp Arg Val Arg Val Cys Phe Val Thr Ser Met Met Thr Gly Arg
 115 120 125
 Ala Ala Arg Trp Ala Ser Ala Lys Leu Glu Arg Ser His Tyr Leu Met
 130 135 140
 His Asn Tyr Pro Ala Phe Met Met Glu Met Lys His Val Phe Glu Asp
 145 150 155 160
 Pro Gln Arg Arg Glu Val Ala Lys Arg Lys Ile Arg Arg Leu Arg Gln
 165 170 175
 Gly Met Gly Ser Val Ile Asp Tyr Ser Asn Ala Phe Gln Met Ile Ala
 180 185 190
 Gln Asp Leu Asp Trp Asn Glu Pro Ala Leu Ile Asp Gln Tyr His Glu
 195 200 205
 Gly Leu Ser Asp His Ile Gln Glu Glu Leu Ser His Leu Glu Val Ala
 210 215 220
 Lys Ser Leu Ser Ala Leu Ile Gly Gln Cys Ile His Ile Glu Arg Arg
 225 230 235 240
 Leu Ala Arg Ala Ala Ala Ala Arg Lys Pro Arg Ser Pro Pro Arg Ala
 245 250 255
 Leu Val Leu Pro His Ile Ala Ser His His Gln Val Asp Pro Thr Glu
 260 265 270
 Pro Val Gly Gly Ala Arg Met Arg Leu Thr Gln Glu Glu Lys Glu Arg
 275 280 285
 Arg Arg Lys Leu Asn Leu Cys Leu Tyr Cys Gly Thr Gly Gly His Tyr
 290 295 300
 Ala Asp Asn Cys Pro Ala Lys Ala Ser Lys Ser Ser Pro Ala Gly Asn
 305 310 315 320
 Ser Pro Ala Pro Leu
 325

<210> 1817
 <211> 357
 <212> PRT
 <213> Homo sapiens

<400> 1817
 Met Leu Gln Ile His Leu Pro Gly Arg His Thr Leu Phe Val Arg Ala
 1 5 10 15
 Met Ile Asp Ser Gly Ala Ser Gly Asn Phe Ile Asp His Glu Tyr Val
 20 25 30
 Ala Gln Asn Gly Ile Pro Leu Arg Ile Lys Asp Trp Pro Ile Leu Val
 35 40 45
 Glu Ala Ile Asp Gly Arg Pro Ile Ala Ser Gly Pro Val Val His Glu
 50 55 60
 Thr His Asp Leu Ile Val Asp Leu Gly Asp His Arg Glu Val Leu Ser
 65 70 75 80
 Phe Asp Val Thr Gln Ser Pro Phe Phe Pro Val Val Leu Gly Val Arg
 85 90 95

Trp Leu Ser Thr His Asp Pro Asn Ile Thr Trp Ser Thr Arg Ser Ile
 100 105 110
 Val Phe Asp Ser Glu Tyr Cys Arg Tyr His Cys Arg Met Tyr Ser Pro
 115 120 125
 Ile Pro Pro Ser Leu Pro Pro Pro Ala Pro Gln Pro Pro Leu Tyr Tyr
 130 135 140
 Pro Val Asp Gly Tyr Arg Val Tyr Gln Pro Val Arg Tyr Tyr Tyr Val
 145 150 155 160
 Gln Asn Val Tyr Thr Pro Val Asp Glu His Val Tyr Pro Asp His Arg
 165 170 175
 Leu Val Asp Pro His Ile Glu Met Ile Pro Gly Ala His Ser Ile Pro
 180 185 190
 Ser Gly His Val Tyr Ser Leu Ser Glu Pro Glu Met Ala Ala Leu Arg
 195 200 205
 Asp Phe Val Ala Arg Asn Val Lys Asp Gly Leu Ile Thr Pro Thr Ile
 210 215 220
 Ala Pro Asn Gly Ala Gln Val Leu Gln Val Lys Arg Gly Trp Lys Leu
 225 230 235 240
 Gln Val Ser Tyr Asp Cys Arg Ala Pro Asn Asn Phe Thr Ile Gln Asn
 245 250 255
 Gln Tyr Pro Arg Leu Ser Ile Pro Asn Leu Glu Asp Gln Ala His Leu
 260 265 270
 Ala Thr Tyr Thr Glu Phe Val Pro Gln Ile Pro Gly Tyr Gln Thr Tyr
 275 280 285
 Pro Thr Tyr Ala Ala Tyr Pro Thr Tyr Pro Val Gly Phe Ala Trp Tyr
 290 295 300
 Pro Val Gly Arg Asp Gly Gln Gly Arg Ser Leu Tyr Val Pro Val Met
 305 310 315 320
 Ile Thr Trp Asn Pro His Trp Tyr Arg Gln Pro Pro Val Pro Gln Tyr
 325 330 335
 Pro Pro Pro Gln Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro Pro
 340 345 350
 Ser Tyr Ser Thr Leu
 355

<210> 1818
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 1818
 Met Ser Thr Gly Asn Thr Val Cys Ser Arg Tyr His Phe Tyr Val Arg
 1 5 10 15
 Val Asn Gln Ala Val Ile Trp Val Asp Val Leu Ile Tyr Trp Ser Val
 20 25 30
 His Ile Leu Asp Ile Val Ile Pro His Trp Leu Val Asn Ser Val Ser
 35 40 45
 Ile Tyr Trp Ile Ile Glu Trp Arg Leu Trp Cys Trp Trp Trp Glu Arg
 50 55 60
 Trp Trp Tyr Trp Arg Ile His Pro Ala Val Val Ala Ala Val Phe Arg
 65 70 75 80
 Ile Lys Asp Asp Arg Ser Ser Ala Pro Cys Asp Ile Gly Ile Met Cys
 85 90 95

Ala Gln Pro Ala Asn Pro
100

<210> 1819

<211> 831

<212> PRT

<213> Homo sapiens

<400> 1819

Met	Glu	Arg	Ala	Gly	Ala	Thr	Ser	Arg	Gly	Gly	Gln	Ala	Pro	Gly	Phe	1	5	10	15
Leu	Leu	Arg	Leu	His	Thr	Glu	Gly	Arg	Ala	Glu	Ala	Ala	Arg	Val	Gln	20	25	30	
Glu	Gln	Asp	Leu	Arg	Gln	Trp	Gly	Leu	Thr	Gly	Ile	His	Leu	Arg	Ser	35	40	45	
Tyr	Gln	Leu	Glu	Gly	Val	Asn	Trp	Leu	Ala	Gln	Arg	Phe	His	Cys	Gln	50	55	60	
Asn	Gly	Cys	Ile	Leu	Gly	Asp	Glu	Met	Gly	Leu	Gly	Lys	Thr	Cys	Gln	65	70	75	80
Thr	Ile	Ala	Leu	Phe	Ile	Tyr	Leu	Ala	Gly	Arg	Leu	Asn	Asp	Glu	Gly	85	90	95	
Pro	Phe	Leu	Ile	Leu	Cys	Pro	Leu	Ser	Val	Leu	Ser	Asn	Trp	Lys	Glu	100	105	110	
Glu	Met	Gln	Arg	Phe	Ala	Pro	Gly	Leu	Ser	Cys	Val	Thr	Tyr	Ala	Gly	115	120	125	
Asp	Lys	Glu	Glu	Arg	Ala	Cys	Leu	Gln	Gln	Asp	Leu	Lys	Gln	Glu	Ser	130	135	140	
Arg	Phe	His	Val	Leu	Leu	Thr	Thr	Tyr	Glu	Ile	Cys	Leu	Lys	Asp	Ala	145	150	155	160
Ser	Phe	Leu	Lys	Ser	Phe	Pro	Trp	Ser	Val	Leu	Val	Val	Asp	Glu	Ala	165	170	175	
His	Arg	Leu	Lys	Asn	Gln	Ser	Ser	Leu	Leu	His	Lys	Thr	Leu	Ser	Glu	180	185	190	
Phe	Ser	Val	Val	Phe	Ser	Leu	Leu	Leu	Thr	Gly	Thr	Pro	Ile	Gln	Asn	195	200	205	
Ser	Leu	Gln	Glu	Leu	Tyr	Ser	Leu	Leu	Ser	Phe	Val	Glu	Pro	Asp	Leu	210	215	220	
Phe	Ser	Lys	Glu	Glu	Val	Gly	Asp	Phe	Ile	Gln	Arg	Tyr	Gln	Asp	Ile	225	230	235	240
Glu	Lys	Glu	Ser	Glu	Ser	Ala	Ser	Glu	Leu	His	Lys	Leu	Leu	Gln	Pro	245	250	255	
Phe	Leu	Leu	Arg	Arg	Val	Lys	Ala	Glu	Val	Ala	Thr	Glu	Leu	Pro	Lys	260	265	270	
Lys	Thr	Glu	Val	Val	Ile	Tyr	His	Gly	Met	Ser	Ala	Leu	Gln	Lys	Lys	275	280	285	
Tyr	Tyr	Lys	Ala	Ile	Leu	Met	Lys	Asp	Leu	Asp	Ala	Phe	Glu	Asn	Glu	290	295	300	
Thr	Ala	Lys	Lys	Val	Lys	Leu	Gln	Asn	Ile	Leu	Ser	Gln	Leu	Arg	Lys	305	310	315	320
Cys	Val	Asp	His	Pro	Tyr	Leu	Phe	Asp	Gly	Val	Glu	Pro	Glu	Pro	Phe	325	330	335	
Glu	Val	Gly	Asp	His	Leu	Thr	Glu	Ala	Ser	Gly	Lys	Leu	His	Leu	Leu	340	345	350	

Asp	Lys	Leu	Leu	Ala	Phe	Leu	Tyr	Ser	Gly	Gly	His	Arg	Val	Leu	Leu
		355					360					365			
Phe	Ser	Gln	Met	Thr	Gln	Met	Leu	Asp	Ile	Leu	Gln	Asp	Tyr	Met	Asp
	370					375					380				
Tyr	Arg	Gly	Tyr	Ser	Tyr	Glu	Arg	Val	Asp	Gly	Ser	Val	Arg	Gly	Glu
385					390					395					400
Glu	Arg	His	Leu	Ala	Ile	Lys	Asn	Phe	Gly	Gln	Gln	Pro	Ile	Phe	Val
				405					410					415	
Phe	Leu	Leu	Ser	Thr	Arg	Ala	Gly	Gly	Val	Gly	Met	Asn	Leu	Thr	Ala
			420					425					430		
Ala	Asp	Thr	Val	Ile	Phe	Val	Asp	Ser	Asp	Phe	Asn	Pro	Gln	Asn	Asp
		435					440					445			
Leu	Gln	Ala	Ala	Ala	Arg	Ala	His	Arg	Ile	Gly	Gln	Asn	Lys	Ser	Val
	450					455					460				
Lys	Val	Ile	Arg	Leu	Ile	Gly	Arg	Asp	Thr	Val	Glu	Glu	Ile	Val	Tyr
465					470					475					480
Arg	Lys	Ala	Ala	Ser	Lys	Leu	Gln	Leu	Thr	Asn	Met	Ile	Ile	Glu	Gly
				485					490					495	
Gly	His	Phe	Thr	Leu	Gly	Ala	Gln	Lys	Pro	Ala	Ala	Asp	Ala	Asp	Leu
			500					505					510		
Gln	Leu	Ser	Glu	Ile	Leu	Lys	Phe	Gly	Leu	Asp	Lys	Leu	Leu	Ala	Ser
		515					520					525			
Glu	Gly	Ser	Thr	Met	Asp	Glu	Ile	Asp	Leu	Glu	Ser	Ile	Leu	Gly	Glu
	530					535					540				
Thr	Lys	Asp	Gly	Gln	Trp	Val	Ser	Asp	Ala	Leu	Pro	Ala	Ala	Glu	Gly
545					550					555					560
Gly	Ser	Arg	Asp	Gln	Glu	Glu	Gly	Lys	Asn	His	Met	Tyr	Leu	Phe	Glu
				565					570					575	
Gly	Lys	Asp	Tyr	Ser	Lys	Glu	Pro	Ser	Lys	Glu	Asp	Arg	Lys	Ser	Phe
			580					585					590		
Glu	Gln	Leu	Val	Asn	Leu	Gln	Lys	Thr	Leu	Leu	Glu	Lys	Ala	Ser	Gln
		595					600					605			
Glu	Gly	Arg	Ser	Leu	Arg	Asn	Lys	Gly	Ser	Val	Leu	Ile	Pro	Gly	Leu
	610					615					620				
Val	Glu	Gly	Ser	Thr	Lys	Arg	Lys	Arg	Val	Leu	Ser	Pro	Glu	Glu	Leu
625					630					635					640
Glu	Asp	Arg	Gln	Lys	Lys	Arg	Gln	Glu	Ala	Ala	Ala	Lys	Arg	Arg	Arg
				645					650					655	
Leu	Ile	Glu	Glu	Lys	Lys	Arg	Gln	Lys	Glu	Glu	Ala	Glu	His	Lys	Lys
			660					665					670		
Lys	Val	Ala	Trp	Trp	Glu	Ser	Asn	Asn	Tyr	Gln	Ser	Phe	Cys	Leu	Pro
		675					680					685			
Ser	Glu	Glu	Ser	Glu	Pro	Glu	Asp	Leu	Glu	Asn	Gly	Glu	Glu	Ser	Ser
	690					695					700				
Ala	Glu	Leu	Asp	Tyr	Gln	Asp	Pro	Asp	Ala	Thr	Ser	Leu	Lys	Tyr	Val
705					710					715					720
Ser	Gly	Asp	Val	Thr	His	Pro	Gln	Ala	Gly	Ala	Glu	Asp	Ala	Leu	Ile
				725					730					735	
Val	His	Cys	Val	Asp	Asp	Ser	Gly	His	Trp	Gly	Arg	Gly	Gly	Leu	Phe
			740					745					750		
Thr	Ala	Leu	Glu	Lys	Arg	Ser	Ala	Glu	Pro	Arg	Lys	Ile	Tyr	Glu	Leu
		755					760					765			
Ala	Gly	Lys	Met	Lys	Asp	Leu	Ser	Leu	Gly	Gly	Val	Leu	Leu	Phe	Pro
	770					775					780				

Val	Asp	Asp	Lys	Glu	Ser	Arg	Asn	Lys	Gly	Gln	Asp	Leu	Leu	Ala	Leu
785					790					795					800
Ile	Val	Ala	Gln	His	Arg	Asp	Arg	Ser	Asn	Val	Leu	Ser	Gly	Ile	Lys
				805					810					815	
Met	Ala	Ala	Leu	Glu	Glu	Gly	Leu	Lys	Lys	Ile	Phe	Leu	Ala	Ala	
			820					825					830		

<210> 1820

<211> 212

<212> PRT

<213> Homo sapiens

<400> 1820

Met	Leu	Asn	Lys	Val	Leu	Ser	Arg	Leu	Gly	Val	Ala	Gly	Gln	Trp	Arg
1				5					10					15	
Phe	Val	Asp	Val	Leu	Gly	Leu	Glu	Glu	Glu	Ser	Leu	Gly	Ser	Val	Pro
			20					25					30		
Ala	Pro	Ala	Cys	Ala	Leu	Leu	Leu	Leu	Phe	Pro	Leu	Thr	Ala	Gln	His
		35					40					45			
Glu	Asn	Phe	Arg	Lys	Lys	Gln	Ile	Glu	Glu	Leu	Lys	Gly	Gln	Glu	Val
	50					55					60				
Ser	Pro	Lys	Val	Tyr	Phe	Met	Lys	Gln	Thr	Ile	Gly	Asn	Ser	Cys	Gly
65				70					75					80	
Thr	Ile	Gly	Leu	Ile	His	Ala	Val	Ala	Asn	Asn	Gln	Asp	Lys	Leu	Gly
			85					90						95	
Phe	Glu	Asp	Gly	Ser	Val	Leu	Lys	Gln	Phe	Leu	Ser	Glu	Thr	Glu	Lys
			100					105					110		
Met	Ser	Pro	Glu	Asp	Arg	Ala	Lys	Cys	Phe	Glu	Lys	Asn	Glu	Ala	Ile
		115					120					125			
Gln	Ala	Ala	His	Asp	Ala	Val	Ala	Gln	Glu	Gly	Gln	Cys	Arg	Val	Asp
	130				135						140				
Asp	Lys	Val	Asn	Phe	His	Phe	Ile	Leu	Phe	Asn	Asn	Val	Asp	Gly	His
145					150				155					160	
Leu	Tyr	Glu	Leu	Asp	Gly	Arg	Met	Pro	Phe	Pro	Val	Asn	His	Gly	Ala
			165					170						175	
Ser	Ser	Glu	Asp	Thr	Leu	Leu	Lys	Asp	Ala	Ala	Lys	Val	Cys	Arg	Glu
			180					185					190		
Phe	Thr	Glu	Arg	Glu	Gln	Gly	Glu	Val	Arg	Phe	Ser	Ala	Val	Ala	Leu
		195				200						205			
Cys	Lys	Ala	Ala												
			210												

<210> 1821

<211> 323

<212> PRT

<213> Homo sapiens

<400> 1821

Met	Asp	Ser	Lys	Tyr	Gln	Cys	Val	Lys	Leu	Asn	Asp	Gly	His	Phe	Met
1				5					10					15	
Pro	Val	Leu	Gly	Phe	Gly	Thr	Tyr	Ala	Pro	Ala	Glu	Val	Pro	Lys	Ser
			20					25					30		

Lys Ala Leu Glu Ala Val Lys Leu Ala Ile Glu Ala Gly Tyr His His
 35 40 45
 Ile Asp Ser Ala His Val Tyr Asn Asn Glu Glu Gln Val Gly Leu Ala
 50 55 60
 Ile Arg Ser Lys Ile Ala Asp Gly Ser Val Lys Arg Glu Asp Ile Phe
 65 70 75 80
 Tyr Thr Ser Lys Leu Trp Ser Asn Ser His Arg Pro Glu Leu Val Arg
 85 90 95
 Pro Ala Leu Glu Arg Ser Leu Lys Asn Leu Gln Leu Asp Tyr Ala Asp
 100 105 110
 Leu Tyr Leu Ile His Phe Pro Val Ser Val Lys Pro Gly Glu Glu Val
 115 120 125
 Ile Pro Lys Asp Glu Asn Gly Lys Ile Leu Phe Asp Thr Val Asp Leu
 130 135 140
 Cys Ala Thr Trp Glu Ala Met Glu Lys Cys Lys Asp Ala Gly Leu Ala
 145 150 155 160
 Lys Ser Ile Gly Val Ser Asn Phe Asn His Arg Leu Leu Glu Met Ile
 165 170 175
 Leu Asn Glu Pro Gly Leu Lys Tyr Glu Pro Val Cys Asn Gln Val Glu
 180 185 190
 Cys His Pro Tyr Phe Asn Gln Arg Lys Leu Leu Asp Phe Cys Lys Ser
 195 200 205
 Lys Asp Ile Val Leu Val Ala Tyr Ser Ala Leu Gly Ser His Arg Glu
 210 215 220
 Glu Pro Trp Val Asp Pro Asn Ser Pro Val Leu Leu Glu Asp Pro Val
 225 230 235 240
 Leu Cys Ala Leu Ala Lys Lys His Lys Arg Thr Pro Ala Leu Ile Ala
 245 250 255
 Leu Arg Tyr Gln Leu Gln Arg Gly Val Val Val Leu Ala Lys Ser Tyr
 260 265 270
 Asn Glu Gln Arg Ile Arg Gln Asn Val Gln Val Phe Glu Phe Gln Leu
 275 280 285
 Thr Ser Glu Glu Met Lys Ala Ile Asp Gly Leu Asn Arg Asn Val Arg
 290 295 300
 Tyr Leu Thr Leu Asp Ile Phe Ala Gly Pro Pro Asn Tyr Pro Ile Ser
 305 310 315 320
 Asp Glu Tyr

<210> 1822
 <211> 141
 <212> PRT
 <213> Homo sapiens

<400> 1822
 Met Gly Phe Gln Lys Phe Ser Pro Phe Leu Ala Leu Ser Ile Leu Val
 1 5 10 15
 Leu Leu Gln Ala Gly Ser Leu His Ala Ala Pro Phe Arg Ser Ala Leu
 20 25 30
 Glu Ser Ser Pro Ala Asp Pro Ala Thr Leu Ser Glu Asp Glu Ala Arg
 35 40 45
 Leu Leu Leu Ala Ala Leu Val Gln Asp Tyr Val Gln Met Lys Ala Ser
 50 55 60

Glu	Leu	Glu	Gln	Glu	Gln	Glu	Arg	Glu	Gly	Ser	Ser	Leu	Asp	Ser	Pro
65					70					75					80
Arg	Ser	Lys	Arg	Cys	Gly	Asn	Leu	Ser	Thr	Cys	Met	Leu	Gly	Thr	Tyr
				85					90					95	
Thr	Gln	Asp	Phe	Asn	Lys	Phe	His	Thr	Phe	Pro	Gln	Thr	Ala	Ile	Gly
			100					105					110		
Val	Gly	Ala	Pro	Gly	Lys	Lys	Arg	Asp	Met	Ser	Ser	Asp	Leu	Glu	Arg
		115					120					125			
Asp	His	Arg	Pro	His	Val	Ser	Met	Pro	Gln	Asn	Ala	Asn			
130						135					140				

<210> 1823

<211> 6188

<212> DNA

<213> Homo sapiens

<400> 1823

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acgaagaagg	gacgagctct	ctgaagagat	caacaactta	agagagaagg	tcatgaagca	120
gtcggaggag	aacaacaacc	tgcagagcca	ggtgcagaag	ctcacagagg	agaacaccac	180
ccttcgagag	caagtggaa	ccaccctga	ggatgaggat	gatgacatcg	agctccgcgg	240
tgtgtcagca	gctgtgtccc	cacccctcc	aatagaggaa	gagtgtccag	aagacctccc	300
agagaagttc	gatggcaacc	cagacatgct	ggctcctttc	atggcccagt	gccagatctt	360
catggaaaag	agcaccaggg	atttctcagt	tgatcgtgtc	cgtgtctgct	tcgtgacaag	420
catgatgacc	ggcgtgtctg	cccgttgggc	ctcagcaaag	ctggagcgct	cccactacct	480
gatgcacaac	taccagctt	tcatgatgga	aatgaagcat	gtctttgaag	accctcagag	540
gcgagagggt	gccaaacgca	agatcagacg	cctgcgcca	ggcatggggt	ctgtcatcga	600
ctactccaat	gctttccaga	tgattgcccc	ggacctggat	tggaaacgagc	ctgcgctgat	660
tgaccagtac	cacgagggcc	tcagcgacca	cattcaggag	gagctctccc	acctcgaggt	720
cgccaagtgc	ctgtctgtct	tgattgggca	gtgcattcac	attgagagaa	ggctggccag	780
ggctgtgtca	gctcgcaagc	cacgtctgcc	accccgggcg	ctggtgttgc	ctcacattgc	840
aagccaccac	caggtagatc	caaccgagcc	ggtgggagggt	gcccgcgatgc	gcctgacgca	900
ggaagaaaaa	gaaagacgca	gaaagctgaa	cctgtgcctc	tactgtggaa	caggagggtca	960
ctacgtgtac	aattgtcctg	ccaaggcctc	aaagtcttcg	ccggcgggaa	actccccggc	1020
cccgtgttag	agggaccttc	agcgaccggg	ccagaaataa	taagggtccc	acaagatgat	1080
gcctcatctc	cacacttgca	agtgatgtct	cagattcatc	ttccggggcag	acacaccctg	1140
ttcgtccgag	ccatgatcga	ttctggtgct	tctggcaact	tcattgatca	cgaatatgtt	1200
gctcaaaatg	gaattcctct	aagaatcaag	gactggccaa	tacttgtgga	agcaattgat	1260
gggcgccccca	tagcatcggt	cccagttgtc	cacgaaactc	acgacctgat	agttgacctg	1320
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ctaggggttc	gctggctgag	cacacatgat	cccaatatca	catggagcac	tcgatctatc	1440
gtctttgatt	ctgaatactg	ccgtaccac	tgcgggatgt	attctccaat	accaccatcg	1500
ctcccaccac	cagcaccaca	accgccactc	tattatccag	tagatggata	cagagtttac	1560
caaccagtga	ggtattacta	tgtccagaat	gtgtacactc	cagtagatga	gcacgtctac	1620
ccagatcacc	gcctgggtga	ccctcacata	gaaatgatac	ctggagcaca	cagtattccc	1680
agtggacatg	tgtattcact	gtccgaacct	gaaatggcag	ctcttcgaga	ttttgtggca	1740
agaaatgtaa	aagatgggct	aattactcca	acgattgcac	ctaattggagc	ccaagtcttc	1800
caggtgaaga	gggggtggaa	actgcaagtt	tcttatgatt	gccgagctcc	aaacaatttt	1860
actatccaga	atcagtatcc	tcgcctatct	attccaaatt	tagaagacca	agcacacctg	1920
gcaacgtaca	ctgaattcgt	acctcaaata	cctggatacc	aaacataccc	cacatatgcc	1980
gcgtacccga	cctacccagt	aggattcgcc	tggtagccag	tgggacgaga	cggacaagga	2040
agatcactat	atgtacctgt	gatgatcact	tggaatccac	actggtaccg	ccagcctccg	2100
gtaccacagt	acccgcccgc	acagccgcgc	cctccaccac	caccaccgcc	gccgcctcca	2160


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cacagacatc tcacatcaga tacagacagt tccaagattg acaacagaga acaacctgct 5460
ggaaagacct gggcagaaat ggagagccct gcgggaacca tgctacattt tcatctaaag 5520
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taggggatat ataatcataa gcatttttagg gtgggagggg ctattaagta attttaagtg 5700
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tgcgtactta cttgtaacct tttaccctat aattgctatc cttaaagatt tcaaataaac 5820
tcggagggaa ctgcagggag accaacttat ttagagcgaa ttggacatgg ataaaaaccc 5880
cagtgggaga aagttcaaag gtgattagat taataattta atagaggatg agtgacctct 5940
gataaattac tgctagaatg aacttgctca tgatggatgg taaattttca tgggaagtat 6000
aaaagtgata aataaaaacc cttgctttta cccctgtcag tagccctcct cctaccactg 6060
aaccctcattg cccctacccc tcttctaac tttattgctg tattctcttc actctatatt 6120
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ttaagtgc 6188

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<210> 1824
<211> 866
<212> DNA
<213> Homo sapiens

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<400> 1824
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gtctcagaac tccgagctgc aactaaatta actgaggaaa agtatgaact gaaagagggg 120
cagaccctgg atgtgaaatg tgactacacg ctagagaagt ttgccagcag ccagaaagct 180
tggcagataa taagggacgg agagatgccc aagaccctgg catgcacaga gaggccttca 240
aagaattccc atccagtcca agtggggagg atcactactag aagactacca tgatcatggt 300
ttactgcgcg tccgaatggt caaccttcaa gtggaagatt ctggactgta tcagtgtgtg 360
atctaccagc ctcccaagga gcctcacatg ctgttcgatc gcatccgctt ggtggtgacc 420
aagggttttt cagggacccc tggctccaat gagaattcta cccagaatgt gtataagatt 480
cctcctacca ccactaaggc cttgtgcccc ctctatacca gccccagAAC tgtgacccaa 540
gctccaccca agtcaactgc cgatgtctcc actcctgact ctgaaatcaa ccttaciaat 600
gtgacagata tcatcagggt tccggtgttc aacattgtca ttctcctggc tgggtggattc 660
ctgagtaaga gcctggtctt ctctgtcctg tttgctgtca cgctgaggtc atttgtacct 720
taggcccacg aaccacagag aatgtcctct gacttccagc cacatccatc tggcagttgt 780
gccaagggag gagggaggag gtaaaaggca gggagttaat aacatgaatt aaatctgtaa 840
tcaccrgcta aaaaaaaaaa aaaaaa 866

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<210> 1825
<211> 234
<212> PRT
<213> Homo sapiens

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<400> 1825
Met Arg Lys Thr Arg Leu Trp Gly Leu Leu Trp Met Leu Phe Val Ser
 1             5             10             15
Glu Leu Arg Ala Ala Thr Lys Leu Thr Glu Glu Lys Tyr Glu Leu Lys
      20             25             30
Glu Gly Gln Thr Leu Asp Val Lys Cys Asp Tyr Thr Leu Glu Lys Phe
      35             40             45
Ala Ser Ser Gln Lys Ala Trp Gln Ile Ile Arg Asp Gly Glu Met Pro
      50             55             60
Lys Thr Leu Ala Cys Thr Glu Arg Pro Ser Lys Asn Ser His Pro Val

```

65					70					75					80
Gln	Val	Gly	Arg	Ile	Ile	Leu	Glu	Asp	Tyr	His	Asp	His	Gly	Leu	Leu
				85					90					95	
Arg	Val	Arg	Met	Val	Asn	Leu	Gln	Val	Glu	Asp	Ser	Gly	Leu	Tyr	Gln
			100						105				110		
Cys	Val	Ile	Tyr	Gln	Pro	Pro	Lys	Glu	Pro	His	Met	Leu	Phe	Asp	Arg
		115					120					125			
Ile	Arg	Leu	Val	Val	Thr	Lys	Gly	Phe	Ser	Gly	Thr	Pro	Gly	Ser	Asn
	130					135					140				
Glu	Asn	Ser	Thr	Gln	Asn	Val	Tyr	Lys	Ile	Pro	Pro	Thr	Thr	Thr	Lys
145					150					155					160
Ala	Leu	Cys	Pro	Leu	Tyr	Thr	Ser	Pro	Arg	Thr	Val	Thr	Gln	Ala	Pro
			165						170				175		
Pro	Lys	Ser	Thr	Ala	Asp	Val	Ser	Thr	Pro	Asp	Ser	Glu	Ile	Asn	Leu
		180						185				190			
Thr	Asn	Val	Thr	Asp	Ile	Ile	Arg	Val	Pro	Val	Phe	Asn	Ile	Val	Ile
	195					200					205				
Leu	Leu	Ala	Gly	Gly	Phe	Leu	Ser	Lys	Ser	Leu	Val	Phe	Ser	Val	Leu
	210					215					220				
Phe	Ala	Val	Thr	Leu	Arg	Ser	Phe	Val	Pro						
225					230										

<210> 1826
 <211> 192
 <212> DNA
 <213> Homo sapiens

<400> 1826
 atgcggtgcc acgcccattgg accttcttgt ctgcgtcacgg ccataactag ggaggaagga 60
 gggccgagga gtggaggggc tcaggcgaag ctgggggtgct gttgggggta tccgagtcctc 120
 agaagcacct ggaaccccga cagaagattc tggactcccc agacgggacc aggagaggga 180
 cggcatgagc ga 192

<210> 1827
 <211> 288
 <212> DNA
 <213> Homo sapiens

<400> 1827
 cacacacaaa cacagaacca cacagccagt cccaggagcc cagtaatgga gagccccaaa 60
 aagaagaacc agcagctgaa agtcggggtc ctacacctgg gcagcagaca gaagaagatc 120
 aggatacagc tgagatccca gtgcgcgaca tggaagggtga tctgcaagag ctgcatcagt 180
 caaacaccgg ggataaatct ggatttgggt tccggcgatca aggtgaagat aatacctaaa 240
 gaggaacact gtaaaatgcc agaagcaggt gaagagcaac cacaagtt 288

<210> 1828
 <211> 141
 <212> DNA
 <213> Homo sapiens

<400> 1828
 cacacacaaa cacagaacca cacagccagt cccaggagcc cagtaatgga gagccccaaa 60
 aagaagaacc agcagctgaa agtcggggtc ctacacctgg gcagcagaca gaagaagatc 120

aggatacagc tgagatccca g

141

<210> 1829

<211> 111

<212> DNA

<213> Homo sapiens

<400> 1829

gtgctgggaa gggaaatgcg cgacatggaa ggtgatctgc aagagctgca tcagtcaaac 60
 accggggata aatctggatt tgggttccgg cgtcaagggtg aagataatac c 111

<210> 1830

<211> 64

<212> PRT

<213> Homo sapiens

<400> 1830

Met	Arg	Cys	His	Ala	His	Gly	Pro	Ser	Cys	Leu	Val	Thr	Ala	Ile	Thr
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Arg	Glu	Glu	Gly	Gly	Pro	Arg	Ser	Gly	Gly	Ala	Gln	Ala	Lys	Leu	Gly
			20					25					30		
Cys	Cys	Trp	Gly	Tyr	Pro	Ser	Pro	Arg	Ser	Thr	Trp	Asn	Pro	Asp	Arg
		35					40					45			
Arg	Phe	Trp	Thr	Pro	Gln	Thr	Gly	Pro	Gly	Glu	Gly	Arg	His	Glu	Arg
	50					55					60				

<210> 1831

<211> 96

<212> PRT

<213> Homo sapiens

<400> 1831

His	Thr	Gln	Thr	Gln	Asn	His	Thr	Ala	Ser	Pro	Arg	Ser	Pro	Val	Met
1				5					10					15	
Glu	Ser	Pro	Lys	Lys	Lys	Asn	Gln	Gln	Leu	Lys	Val	Gly	Ile	Leu	His
		20					25					30			
Leu	Gly	Ser	Arg	Gln	Lys	Lys	Ile	Arg	Ile	Gln	Leu	Arg	Ser	Gln	Cys
		35				40					45				
Ala	Thr	Trp	Lys	Val	Ile	Cys	Lys	Ser	Cys	Ile	Ser	Gln	Thr	Pro	Gly
	50					55				60					
Ile	Asn	Leu	Asp	Leu	Gly	Ser	Gly	Val	Lys	Val	Lys	Ile	Ile	Pro	Lys
65				70				75						80	
Glu	Glu	His	Cys	Lys	Met	Pro	Glu	Ala	Gly	Glu	Glu	Gln	Pro	Gln	Val
			85					90						95	

<210> 1832

<211> 47

<212> PRT

<213> Homo sapiens

<400> 1832

His Thr Gln Thr Gln Asn His Thr Ala Ser Pro Arg Ser Pro Val Met

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<210> 1833
<211> 37
<212> PRT
<213> Homo sapiens
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<210> 1834
<211> 20
<212> PRT
<213> Homo sapiens
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<210> 1835
<211> 20
<212> PRT
<213> Homo sapiens
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```
<210> 1836
<211> 20
<212> PRT
<213> Homo sapiens
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<400> 1836
Ala Phe Phe Val Gln Thr Cys Arg Glu Glu His Lys Lys Lys Asn Pro
 1           5           10           15
Glu Val Pro Val
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20

<210> 1837
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1837
 Glu Glu His Lys Lys Lys Asn Pro Glu Val Pro Val Asn Phe Ala Glu
 1 5 10 15
 Phe Ser Lys Lys
 20

<210> 1838
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1838
 Glu Val Pro Val Asn Phe Ala Glu Phe Ser Lys Lys Cys Ser Glu Arg
 1 5 10 15
 Trp Lys Thr Val
 20

<210> 1839
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1839
 Phe Ser Lys Lys Cys Ser Glu Arg Trp Lys Thr Val Ser Gly Lys Glu
 1 5 10 15
 Lys Ser Lys Phe
 20

<210> 1840
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1840
 Trp Lys Thr Val Ser Gly Lys Glu Lys Ser Lys Phe Asp Glu Met Ala
 1 5 10 15
 Lys Ala Asp Lys
 20

<210> 1841
 <211> 20
 <212> PRT

Asp Pro Asn Ala Pro Lys Arg Pro Pro Ser Gly Phe Phe Leu Phe Cys
1 5 10 15
Ser Glu Phe Arg

20

<210> 1846
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1846
 Pro Ser Gly Phe Phe Leu Phe Cys Ser Glu Phe Arg Pro Lys Ile Lys
 1 5 10 15
 Ser Thr Asn Pro
 20

<210> 1847
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1847
 Ser Glu Phe Arg Pro Lys Ile Lys Ser Thr Asn Pro Gly Ile Ser Ile
 1 5 10 15
 Gly Asp Val Ala
 20

<210> 1848
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1848
 Ser Thr Asn Pro Gly Ile Ser Ile Gly Asp Val Ala Lys Lys Leu Gly
 1 5 10 15
 Glu Met Trp Asn
 20

<210> 1849
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1849
 Gly Asp Val Ala Lys Lys Leu Gly Glu Met Trp Asn Asn Leu Asn Asp
 1 5 10 15
 Ser Glu Lys Gln
 20

<210> 1850
 <211> 20
 <212> PRT

<400> 1850

<210> 1851

<211> 20

<212> PRT

<213> Homo sapiens

<400> 1851

<210> 1852

<211> 20

<212> PRT

<213> Homo sapiens

<400> 1852

Lys Ala Ala Lys Leu Lys Glu Lys Tyr Glu Lys Asp Val Ala Asp Tyr
 1 5 10 15
 Lys Ser Lys Gly
 20

<210> 1853

<211> 20

<212> PRT

<213> Homo sapiens

<400> 1853

Tyr Glu Lys Asp Val Ala Asp Tyr Lys Ser Lys Gly Lys Phe Asp Gly
1 5 10 15
Ala Lys Gly Pro
20

<210> 1854

<211> 20

<212> PRT

<213> Homo sapiens

<400> 1854

Lys Ser Lys Gly Lys Phe Asp Gly Ala Lys Gly Pro Ala Lys Val Ala
 1 5 10 15
 Arg Lys Lys Val

20

<210> 1855
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1855
 Ala Lys Gly Pro Ala Lys Val Ala Arg Lys Lys Val Glu Glu Glu Asp
 1 5 10 15
 Glu Glu Glu Glu
 20

<210> 1856
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1856
 Arg Lys Lys Val Glu Glu Glu Asp Glu Glu Gln Glu Glu Glu Glu Glu
 1 5 10 15
 Glu Glu Glu Glu
 20

<210> 1857
 <211> 28
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 1857
 agtgcgaatt cgggctgcgt gcaggagg

28

<210> 1858
 <211> 32
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 1858
 ggactcgagc tactgcaagt ctggtgtgga tg

32

<210> 1859
 <211> 33
 <212> DNA
 <213> Artificial Sequence

<220>

<223> PCR primer

<400> 1859

agatgaattc acgcgtccgc gccgcgcggc gca

33

<210> 1860

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 1860

agttctcgag tcacctccct gggccccttt g

31

<210> 1861

<211> 945

<212> DNA

<213> Homo sapiens

<400> 1861

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cagggattcg	ccattccgat	cgggcaggcg	atggcgatcg	cgggccagat	caagcttccc	120
accgttcata	tcgggcctac	cgccttcctc	ggcttgggtg	ttgtcgacaa	caacggcaac	180
ggcgcacgag	tccaacgcgt	ggtcgggagc	gctccggcgg	caagtctcgg	catctccacc	240
ggcgacgtga	tcaccgcggt	cgacggcgct	ccgatcaact	cggccaccgc	gatggcggac	300
gcgcttaacg	ggcatcatcc	cggtgacgtc	atctcggtga	cctggcaaac	caagtcgggc	360
ggcacgcgta	cagggaaacgt	gacattggcc	gagggacccc	cggccgaatt	cacgcgtccg	420
cgccgcgcgg	cgcaggggag	gcgagaggcg	ccccccgggtg	gagagcctga	gccccgcgca	480
agtctggcgg	cacctggcga	gcggagccgg	agtcgggctg	gggaccgcgg	ggttgaggcc	540
ggaccgcggc	ggggtcgggg	gagaaacgcg	cgctgccctg	gcacggggccc	caaccccccg	600
gccgcgcgga	atggtatggc	ccggccggag	ttaaggccgg	ggggaggcgg	cgagtcgccg	660
ggcggcggcg	acgatggggc	tgcgtgcagg	aggaacgctg	ggcagggccg	gcgcgggtcg	720
gggggcccgc	gaggggcccg	ggccgagcgg	cggcgcgcag	ggcggcagca	tccactcggg	780
ccgcatcgcc	gcggtgcaca	acgtgccgct	gagcgtgctc	atccggccgc	tgccgtccgt	840
gttggaaccc	gccaaagggtg	agagcctcgt	ggacacgatc	cgggaggacc	cagacagcgt	900
gccccccatc	gatgtcctct	ggatcaaagg	ggcccaggga	ggtga		945

<210> 1862

<211> 822

<212> DNA

<213> Homo sapiens

<400> 1862

atgcatcacc	atcaccatca	cacggccgcg	tccgataact	tccagctgtc	ccaggggtggg	60
cagggattcg	ccattccgat	cgggcaggcg	atggcgatcg	cgggccagat	caagcttccc	120
accgttcata	tcgggcctac	cgccttcctc	ggcttgggtg	ttgtcgacaa	caacggcaac	180
ggcgcacgag	tccaacgcgt	ggtcgggagc	gctccggcgg	caagtctcgg	catctccacc	240
ggcgacgtga	tcaccgcggt	cgacggcgct	ccgatcaact	cggccaccgc	gatggcggac	300
gcgcttaacg	ggcatcatcc	cggtgacgtc	atctcggtga	cctggcaaac	caagtcgggc	360
ggcacgcgta	cagggaaacgt	gacattggcc	gagggacccc	cggccgaatt	cgggctgcgt	420
gcaggaggaa	cgctgggcag	ggccggcgcg	ggtcgggggg	cgcccagggg	gccccgggccg	480

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agcggcgggcg cgcagggcg cagcatccac tcgggcccga tcgccgcggt gcacaacgtg 540
ccgctgagcg tgctcatccg gccgctgccg tccgtgttgg accccgccaa ggtgcagagc 600
ctcgtggaca cgatccggga ggacccagac agcgtgcccc ccatcgatgt cctctggatc 660
aaagggggccc agggaggtga ctactttctac tcctttgggg gctgccaccg ctacgcggcc 720
taccagcaac tgcagcgaga gaccatcccc gccaaagcttg tccagtccac tctctcagac 780
ctaagggtgt acctgggagc atccacacca gacttgcaat ag 822

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<210> 1863

<211> 314

<212> PRT

<213> Homo sapiens

<400> 1863

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Met His His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu
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Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala
          20          25          30
Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala
          35          40          45
Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val
          50          55          60
Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
65          70          75          80
Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr
          85          90          95
Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
          100          105          110
Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr
          115          120          125
Leu Ala Glu Gly Pro Pro Ala Glu Phe Thr Arg Pro Arg Arg Ala Ala
          130          135          140
Gln Gly Arg Arg Glu Ala Pro Pro Gly Gly Glu Pro Glu Pro Arg Ala
145          150          155          160
Ser Leu Ala Ala Pro Gly Glu Arg Ser Arg Ser Arg Ala Gly Asp Arg
          165          170          175
Gly Val Glu Ala Gly Pro Arg Arg Gly Arg Gly Arg Asn Ala Arg Cys
          180          185          190
Pro Gly Thr Gly Pro Asn Pro Pro Ala Ala Arg Asn Gly Met Ala Arg
          195          200          205
Pro Glu Leu Arg Pro Gly Gly Gly Gly Glu Ser Arg Gly Gly Gly Asp
210          215          220
Asp Gly Ala Ala Cys Arg Arg Asn Ala Gly Gln Gly Arg Arg Gly Ser
225          230          235          240
Gly Gly Ala Arg Gly Ala Arg Ala Glu Arg Arg Arg Ala Gly Arg Gln
          245          250          255
His Pro Leu Gly Pro His Arg Arg Gly Ala Gln Arg Ala Ala Glu Arg
          260          265          270
Ala His Pro Ala Ala Ala Val Arg Val Gly Pro Arg Gln Gly Ala Glu
          275          280          285
Pro Arg Gly His Asp Pro Gly Gly Pro Arg Gln Arg Ala Pro His Arg
290          295          300
Cys Pro Leu Asp Gln Arg Gly Pro Gly Arg
305          310

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<210> 1864
 <211> 273
 <212> PRT
 <213> Homo sapiens

<400> 1864
 Met His His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu
 1 5 10 15
 Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala
 20 25 30
 Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala
 35 40 45
 Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val
 50 55 60
 Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
 65 70 75 80
 Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr
 85 90 95
 Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
 100 105 110
 Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr
 115 120 125
 Leu Ala Glu Gly Pro Pro Ala Glu Phe Gly Leu Arg Ala Gly Gly Thr
 130 135 140
 Leu Gly Arg Ala Gly Ala Gly Arg Gly Ala Pro Glu Gly Pro Gly Pro
 145 150 155 160
 Ser Gly Gly Ala Gln Gly Gly Ser Ile His Ser Gly Arg Ile Ala Ala
 165 170 175
 Val His Asn Val Pro Leu Ser Val Leu Ile Arg Pro Leu Pro Ser Val
 180 185 190
 Leu Asp Pro Ala Lys Val Gln Ser Leu Val Asp Thr Ile Arg Glu Asp
 195 200 205
 Pro Asp Ser Val Pro Pro Ile Asp Val Leu Trp Ile Lys Gly Ala Gln
 210 215 220
 Gly Gly Asp Tyr Phe Tyr Ser Phe Gly Gly Cys His Arg Tyr Ala Ala
 225 230 235 240
 Tyr Gln Gln Leu Gln Arg Glu Thr Ile Pro Ala Lys Leu Val Gln Ser
 245 250 255
 Thr Leu Ser Asp Leu Arg Val Tyr Leu Gly Ala Ser Thr Pro Asp Leu
 260 265 270
 Gln

<210> 1865
 <211> 790
 <212> DNA
 <213> Homo sapiens

<400> 1865
 ctgattccgc gactccttgg ccgccgctgc gcatggaaag ctctgccaaag atggagagcg 60
 gcggcgccgg ccagcagccc cagccgcagc cccagcagcc cttcctgccg cccgcagcct 120
 gtttctttgc cacggccgca gccgcggcgg ccgcagccgc cgcagcggca gcgcagagcg 180

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cgagcagca gcagcagcag cagcagcagc agcagcaggc gccgagctg agaccggcgg 240
ccgacggcca gccctcaggg ggcggtcaca agtcagcgcc caagcaagtc aagcgacagc 300
gctcgtcttc gcccgaaactg atgcgctgca aacgccggct caacttcagc ggctttggct 360
acagcctgcc gcagcagcag ccggccgccc tggcgcgccc caacgagcgc gagcgcaacc 420
gcgtaagtt ggtcaacctg ggctttgccca cccttcggga gcaggtcccc aacggcgcg 480
ccaacaagaa gatgagtaag gtggagacac tgcgctcggc ggtcgagtac atccgcgcgc 540
tgcagcagct gctggacgag catgacgcgg tgagcgccc cttccaggca ggcgctctgt 600
cgccccaccat ctcccccaac tactccaacg acttgaactc catggccggc tcgcccgtct 660
catcctactc gtcggacgag ggctcttacg acccgctcag ccccgaggag caggagcttc 720
tcgacttcac caactggttc tgaggggctc ggccctggtca ggccctggtg cgaatggact 780
ttggaagcag                                     790

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<210> 1866

<211> 784

<212> DNA

<213> Homo sapiens

<400> 1866

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ccgagactcc ttggccgccc ctgcgcatgg aaagctctgc caagatggag agcggcgggc 60
ccggccagca gcccagccc cagccccagc agcccttctt gccgcccgc gcctgtttct 120
ttgccacggc cgcagccgcg gcggccgcag ccgcccgcag ggcagcgagc agcgcgcagc 180
agcagcagca gcagcagcag cagcagcagc aggcgcgcga gctgagaccg gcggccgacg 240
gccagccctc agggggcggt cacaagtcag cgcccaagca agtcaagcga cagcgctcgt 300
cttcgccccga actgatgcgc tgcaaaccgc ggctcaactt cagcggcttt ggctacagcc 360
tgccgcagca gcagccggcc gccgtggcgc gccgcaacga gcgcgagcgc aaccgcgtca 420
agttggtcaa cctgggcttt gccacccttc gggagcacgt ccccaacggc gcggccaaca 480
agaagatgag taaggtggag aactgcgct cggcggtcga gtacatccgc gcgctgcagc 540
agctgctgga cgagcatgac gcggtgagcg ccgccttcca ggcaggcgct ctgtcgccca 600
ccatctcccc caactactcc aacgacttga actccatggc cggctcgccc gtctcctct 660
actcgtcgga cgagggctct tacgaccgcg tcagccccga ggagcaggag cttctcgact 720
tcaccaactg gttctgaggg gctcggcctg gtcaggccct ggtgcgaatg gactttggaa 780
gcag                                     784

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<210> 1867

<211> 789

<212> DNA

<213> Homo sapiens

<400> 1867

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ttccgcgact ccttggccgc cgctgcgcac ggaaagctct gccagatgg agagcggcgg 60
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ctttgccacg gccgcagccc cggcgggccc agccgcgcga gcggcagcgc agagcgcgca 180
gcagcagcag cagcagcagc agcagcagca gcagcaggcg ccgcagctga gaccggcggc 240
cgacggccag ccctcagggg gcggtcacia gtcagcgccc aagcaagtca agcgacagcg 300
ctcgtcttcg cccgaactga tgcgctgcaa acgcccgttc aacttcagcg gctttggcta 360
cagcctgccg cagcagcagc cggccgcccgt ggcgcgccc aacgagcgcg agcgcaaccg 420
cgtcaagttg gtcaacctgg gctttgccac ccttcgggag cacgtcccc aacggcgcg 480
caacaagaag atgagtaagg tggagacact gcgctcggcg gtcgagtaca tccgcgcgct 540
gcagcagctg ctggacgagc atgacgcggt gagcgcccgc ttccaggcag gcgtcctgtc 600
gcccaccatc tcccccaact actccaacga cttgaactcc atggccggct cgccggtctc 660
atcctactcg tcggacgagg gctcttacga cccgctcagc cccgaggagc aggagcttct 720
cgacttcacc aactggttct gaggggctcg gcctggtcag gccctggtgc gaatggactt 780
tggaagcag                                     789

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<210> 1868
 <211> 785
 <212> DNA
 <213> Homo sapiens

<400> 1868

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tctgattccg cgactccttg gccgccgctg cgcattgaaa gctctgcaa gatggagagc 60
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tgtttctttg ccacggccgc agccgcggcg gccgcagccg ccgcagcggc agcgagagc 180
gcgcagcagc agcagcagca gcagcagcag caggcgccgc agctgagacc ggcggccgac 240
ggccagccct cagggggcgg tcacaagtca gcgcccaagc aagtcaagcg acagcgctcg 300
tcttcgcccg aactgatgcg ctgcaaacgc cggtcaact tcagcggtt tggctacagc 360
ctgcgcagc agcagccggc cgccgtggcg cgccgcaacg agcgcgagcg caaccgcgtc 420
aagttggtca acctgggctt tgccaccctt cgggagcacg tccccaacgg cgcgcccaac 480
aagaagatga gtaaggtgga gacactgcgc tcggcggtcg agtacatccg cgcgctgcag 540
cagctgctgg acgagcatga cgcggtgagc gccgccttcc aggcaggcgt cctgtcgccc 600
accatctccc ccaactactc caacgacttg aactccatgg ccggctcgcc ggtctcatcc 660
tactcgtcgg acgagggctc ttacgacccg ctacgccccg aggagcagga gcttctcgac 720
ttcaccaact ggttctgagg ggctcggcct ggtcaggccc tggcgcaat ggactttgga 780
agcag 785
```

<210> 1869
 <211> 236
 <212> PRT
 <213> Homo sapiens

<400> 1869

```
Met Glu Ser Ser Ala Lys Met Glu Ser Gly Gly Ala Gly Gln Gln Pro
1          5          10          15
Gln Pro Gln Pro Gln Gln Pro Phe Leu Pro Pro Ala Ala Cys Phe Phe
20          25          30
Ala Thr Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Ala Gln
35          40          45
Ser Ala Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Ala Pro
50          55          60
Gln Leu Arg Pro Ala Ala Asp Gly Gln Pro Ser Gly Gly Gly His Lys
65          70          75          80
Ser Ala Pro Lys Gln Val Lys Arg Gln Arg Ser Ser Ser Pro Glu Leu
85          90          95
Met Arg Cys Lys Arg Arg Leu Asn Phe Ser Gly Phe Gly Tyr Ser Leu
100         105         110
Pro Gln Gln Gln Pro Ala Ala Val Ala Arg Arg Asn Glu Arg Glu Arg
115         120         125
Asn Arg Val Lys Leu Val Asn Leu Gly Phe Ala Thr Leu Arg Glu His
130         135         140
Val Pro Asn Gly Ala Ala Asn Lys Lys Met Ser Lys Val Glu Thr Leu
145         150         155         160
Arg Ser Ala Val Glu Tyr Ile Arg Ala Leu Gln Gln Leu Leu Asp Glu
165         170         175
His Asp Ala Val Ser Ala Ala Phe Gln Ala Gly Val Leu Ser Pro Thr
180         185         190
Ile Ser Pro Asn Tyr Ser Asn Asp Leu Asn Ser Met Ala Gly Ser Pro
195         200         205
Val Ser Ser Tyr Ser Ser Asp Glu Gly Ser Tyr Asp Pro Leu Ser Pro
```

<400> 1870

```
<210> 1871
<211> 237
<212> PRT
<213> Homo sapiens
```

<400> 1871

[illegible]

	35		40		45											
Ser	Ala	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Ala
	50						55					60				
Pro	Gln	Leu	Arg	Pro	Ala	Ala	Asp	Gly	Gln	Pro	Ser	Gly	Gly	Gly	Gly	His
65					70					75						80
Lys	Ser	Ala	Pro	Lys	Gln	Val	Lys	Arg	Gln	Arg	Ser	Ser	Ser	Ser	Pro	Glu
				85					90						95	
Leu	Met	Arg	Cys	Lys	Arg	Arg	Leu	Asn	Phe	Ser	Gly	Phe	Gly	Tyr	Ser	
			100					105					110			
Leu	Pro	Gln	Gln	Gln	Pro	Ala	Ala	Val	Ala	Arg	Arg	Asn	Glu	Arg	Glu	
	115						120					125				
Arg	Asn	Arg	Val	Lys	Leu	Val	Asn	Leu	Gly	Phe	Ala	Thr	Leu	Arg	Glu	
	130					135					140					
His	Val	Pro	Asn	Gly	Ala	Ala	Asn	Lys	Lys	Met	Ser	Lys	Val	Glu	Thr	
145				150						155					160	
Leu	Arg	Ser	Ala	Val	Glu	Tyr	Ile	Arg	Ala	Leu	Gln	Gln	Leu	Leu	Asp	
			165					170						175		
Glu	His	Asp	Ala	Val	Ser	Ala	Ala	Phe	Gln	Ala	Gly	Val	Leu	Ser	Pro	
		180					185					190				
Thr	Ile	Ser	Pro	Asn	Tyr	Ser	Asn	Asp	Leu	Asn	Ser	Met	Ala	Gly	Ser	
	195						200				205					
Pro	Val	Ser	Ser	Tyr	Ser	Ser	Asp	Glu	Gly	Ser	Tyr	Asp	Pro	Leu	Ser	
	210					215					220					
Pro	Glu	Glu	Gln	Glu	Leu	Leu	Asp	Phe	Thr	Asn	Trp	Phe				
225					230					235						

<210> 1872

<211> 234

<212> PRT

<213> Homo sapiens

<400> 1872

Met	Glu	Ser	Ser	Ala	Lys	Met	Glu	Ser	Gly	Gly	Ala	Gly	Gln	Gln	Pro
1				5					10					15	
Gln	Pro	Gln	Pro	Gln	Gln	Pro	Phe	Leu	Pro	Pro	Ala	Ala	Cys	Phe	Phe
		20					25						30		
Ala	Thr	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Gln
	35					40					45				
Ser	Ala	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Ala	Pro	Gln	Leu
50					55						60				
Arg	Pro	Ala	Ala	Asp	Gly	Gln	Pro	Ser	Gly	Gly	Gly	His	Lys	Ser	Ala
65				70					75					80	
Pro	Lys	Gln	Val	Lys	Arg	Gln	Arg	Ser	Ser	Ser	Pro	Glu	Leu	Met	Arg
			85					90					95		
Cys	Lys	Arg	Arg	Leu	Asn	Phe	Ser	Gly	Phe	Gly	Tyr	Ser	Leu	Pro	Gln
		100				105						110			
Gln	Gln	Pro	Ala	Ala	Val	Ala	Arg	Arg	Asn	Glu	Arg	Glu	Arg	Asn	Arg
	115					120						125			
Val	Lys	Leu	Val	Asn	Leu	Gly	Phe	Ala	Thr	Leu	Arg	Glu	His	Val	Pro
	130					135					140				
Asn	Gly	Ala	Ala	Asn	Lys	Lys	Met	Ser	Lys	Val	Glu	Thr	Leu	Arg	Ser
145				150						155				160	
Ala	Val	Glu	Tyr	Ile	Arg	Ala	Leu	Gln	Gln	Leu	Leu	Asp	Glu	His	Asp

			165					170					175			
Ala	Val	Ser	Ala	Ala	Phe	Gln	Ala	Gly	Val	Leu	Ser	Pro	Thr	Ile	Ser	
			180					185					190			
Pro	Asn	Tyr	Ser	Asn	Asp	Leu	Asn	Ser	Met	Ala	Gly	Ser	Pro	Val	Ser	
		195					200					205				
Ser	Tyr	Ser	Ser	Asp	Glu	Gly	Ser	Tyr	Asp	Pro	Leu	Ser	Pro	Glu	Glu	
	210					215					220					
Gln	Glu	Leu	Leu	Asp	Phe	Thr	Asn	Trp	Phe							
225					230											

<210> 1873

<211> 1353

<212> DNA

<213> Homo sapiens

<400> 1873

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agaaaaggaa taggatcaag agatacgtgg ctgctggcag agcaagcatg aattcgatga 180
cttcagcagt tccggtggcc aattctgtgt tgggtggggc accccacaat gggtatcctg 240
tgaccccagg aattatgtct cacgtgcccc tgtatccaaa cagccagccg caagtccacc 300
tagttcctgg gaacccacct agtttggtgt cgaatgtgaa tgggcagcct gtgcagaaag 360
ctctgaaaga aggcaaaacc ttggggggcca tccagatcat cattggcctg gctcacatcg 420
gctcggctc catcatggcg acggttctcg taggggaata cctgtctatt tcattctacg 480
gaggctttcc cttctgggga ggcttgtggt ttatcatttc agaattctct tccgtggcag 540
cagaaaatca gccatattct tattgcctgc tgtctggcag tttgggcttg aacatcgtca 600
gtgcaatctg ctctgcagtt ggagtcatac tcttcatcac agatctaagt attccccacc 660
catatgccta ccccgactat tacccttacg cctgggggtgt gaaccctgga atggcgattt 720
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tgctgtttct ctatcaagaa gaagacagag attttaaaca gatgttaacc aagagggact 1140
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cacattcgtg tgctctgctg catgtgagct tgtgggttaa aggaacaaat atttagacat 1260
tcaatcttca ctctttcaat tgtgcattca ttttaataat agatactgag cattcaaaaa 1320
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<210> 1874

<211> 250

<212> PRT

<213> Homo sapiens

<400> 1874

Met	Asn	Ser	Met	Thr	Ser	Ala	Val	Pro	Val	Ala	Asn	Ser	Val	Leu	Val	
1				5				10					15			
Val	Ala	Pro	His	Asn	Gly	Tyr	Pro	Val	Thr	Pro	Gly	Ile	Met	Ser	His	
		20					25					30				
Val	Pro	Leu	Tyr	Pro	Asn	Ser	Gln	Pro	Gln	Val	His	Leu	Val	Pro	Gly	
	35				40					45						
Asn	Pro	Pro	Ser	Leu	Val	Ser	Asn	Val	Asn	Gly	Gln	Pro	Val	Gln	Lys	

50	55	60
Ala Leu Lys Glu Gly Lys Thr Leu Gly Ala Ile Gln Ile Ile Ile Gly		
65	70	75
Leu Ala His Ile Gly Leu Gly Ser Ile Met Ala Thr Val Leu Val Gly		80
	85	90
Glu Tyr Leu Ser Ile Ser Phe Tyr Gly Gly Phe Pro Phe Trp Gly Gly		95
	100	105
Leu Trp Phe Ile Ile Ser Glu Ser Leu Ser Val Ala Ala Glu Asn Gln		110
	115	120
Pro Tyr Ser Tyr Cys Leu Leu Ser Gly Ser Leu Gly Leu Asn Ile Val		125
	130	135
Ser Ala Ile Cys Ser Ala Val Gly Val Ile Leu Phe Ile Thr Asp Leu		140
145	150	155
Ser Ile Pro His Pro Tyr Ala Tyr Pro Asp Tyr Tyr Pro Tyr Ala Trp		160
	165	170
Gly Val Asn Pro Gly Met Ala Ile Ser Gly Val Leu Leu Val Phe Cys		175
	180	185
Leu Leu Glu Phe Gly Ile Ala Cys Ala Ser Ser His Phe Gly Cys Gln		190
	195	200
Leu Val Cys Cys Gln Ser Ser Asn Val Ser Val Ile Tyr Pro Asn Ile		205
	210	215
Tyr Ala Ala Asn Pro Val Ile Thr Pro Glu Pro Val Thr Ser Pro Pro		220
225	230	235
Ser Tyr Ser Ser Glu Ile Gln Ala Asn Lys		240
	245	250

<210> 1875
 <211> 1155
 <212> DNA
 <213> Homo sapiens

<400> 1875
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 accgttcata tcgggcctac cgccttcctc ggcttgggtg ttgtcgacaa caacggcaac 180
 ggcgcacgag tccaacgcgt ggctcgggagc gctccggcgg caagtctcgg catctccacc 240
 ggcgacgtga tcaccgcggt cgacggcgct ccgatcaact cggccaccgc gatggcggac 300
 gcgcttaacg ggcattcatcc cgggtgacgtc atctcgggtga cctggcaaac caagtcgggc 360
 ggcacgcgta cagggaacgt gacattggcc gagggacccc cggccgaatt catgacttca 420
 gcagttccgg tggccaattc tgtgttggtg gtggcacccc acaatgggta tcctgtgacc 480
 ccaggaatta tgtctcacgt gcccctgtat ccaaacagcc agccgcaagt ccacctagtt 540
 cctgggaacc cacctagttt ggtgtcgaat gtgaatgggc agcctgtgca gaaagctctg 600
 aaagaaggca aaaccttggg ggccatccag atcatcattg gcctggctca catcggcctc 660
 ggctccatca tggcgacggt tctcgtaggg gaatacctgt ctatttcatt ctacggaggc 720
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 aatcagccat attcttattg cctgctgtct ggcagtttgg gcttgaacat cgtcagtga 840
 atctgctctg cagttggagt catactcttc atcacagatc taagtattcc ccacccatat 900
 gctaccccgc actattatcc ttacgcctgg ggtgtgaacc ctggaatggc gatttctggc 960
 gtgctgctgg tcttctgcct cctggagttt ggcacgcgat gcgcatcttc ccactttggc 1020
 tgccagttgg tctgctgtca atcaagcaat gtgagtgatc tctatccaaa catctatgca 1080
 gcaaaccag tgatcaccac agaaccggtg acctcaccac caagttattc cagtgaatc 1140
 caagcaaata agtaa 1155

<210> 1876
 <211> 384
 <212> PRT
 <213> Homo sapiens

<400> 1876
 Met His His His His His Thr Ala Ala Ser Asp Asn Phe Gln Leu
 1 5 10 15
 Ser Gln Gly Gly Gln Gly Phe Ala Ile Pro Ile Gly Gln Ala Met Ala
 20 25 30
 Ile Ala Gly Gln Ile Lys Leu Pro Thr Val His Ile Gly Pro Thr Ala
 35 40 45
 Phe Leu Gly Leu Gly Val Val Asp Asn Asn Gly Asn Gly Ala Arg Val
 50 55 60
 Gln Arg Val Val Gly Ser Ala Pro Ala Ala Ser Leu Gly Ile Ser Thr
 65 70 75 80
 Gly Asp Val Ile Thr Ala Val Asp Gly Ala Pro Ile Asn Ser Ala Thr
 85 90 95
 Ala Met Ala Asp Ala Leu Asn Gly His His Pro Gly Asp Val Ile Ser
 100 105 110
 Val Thr Trp Gln Thr Lys Ser Gly Gly Thr Arg Thr Gly Asn Val Thr
 115 120 125
 Leu Ala Glu Gly Pro Pro Ala Glu Phe Met Thr Ser Ala Val Pro Val
 130 135 140
 Ala Asn Ser Val Leu Val Val Ala Pro His Asn Gly Tyr Pro Val Thr
 145 150 155 160
 Pro Gly Ile Met Ser His Val Pro Leu Tyr Pro Asn Ser Gln Pro Gln
 165 170 175
 Val His Leu Val Pro Gly Asn Pro Pro Ser Leu Val Ser Asn Val Asn
 180 185 190
 Gly Gln Pro Val Gln Lys Ala Leu Lys Glu Gly Lys Thr Leu Gly Ala
 195 200 205
 Ile Gln Ile Ile Ile Gly Leu Ala His Ile Gly Leu Gly Ser Ile Met
 210 215 220
 Ala Thr Val Leu Val Gly Glu Tyr Leu Ser Ile Ser Phe Tyr Gly Gly
 225 230 235 240
 Phe Pro Phe Trp Gly Gly Leu Trp Phe Ile Ile Ser Glu Ser Leu Ser
 245 250 255
 Val Ala Ala Glu Asn Gln Pro Tyr Ser Tyr Cys Leu Leu Ser Gly Ser
 260 265 270
 Leu Gly Leu Asn Ile Val Ser Ala Ile Cys Ser Ala Val Gly Val Ile
 275 280 285
 Leu Phe Ile Thr Asp Leu Ser Ile Pro His Pro Tyr Ala Tyr Pro Asp
 290 295 300
 Tyr Tyr Pro Tyr Ala Trp Gly Val Asn Pro Gly Met Ala Ile Ser Gly
 305 310 315 320
 Val Leu Leu Val Phe Cys Leu Leu Glu Phe Gly Ile Ala Cys Ala Ser
 325 330 335
 Ser His Phe Gly Cys Gln Leu Val Cys Cys Gln Ser Ser Asn Val Ser
 340 345 350
 Val Ile Tyr Pro Asn Ile Tyr Ala Ala Asn Pro Val Ile Thr Pro Glu
 355 360 365
 Pro Val Thr Ser Pro Pro Ser Tyr Ser Ser Glu Ile Gln Ala Asn Lys
 370 375 380

<210> 1877
 <211> 861
 <212> DNA
 <213> Homo sapiens

<400> 1877
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 acttcagcag ttccggtggc caattctgtg ttggtggtgg caccaccaca tggttatcct 180
 gtgaccccgag gaattatgtc tcacgtgccc ctgtatccaa acagccagcc gcaagtccac 240
 ctagttcctg ggaaccacc tagtttggtg tcgaatgtga atgggcagcc tgtgcagaaa 300
 gctctgaaag aaggcaaaac cttggggggc atccagatca tcattggcct ggctcacatc 360
 ggctcgggct ccattcatggc gacgggtctc gtaggggaat acctgtctat ttcattctac 420
 ggaggctttc ccttctgggg aggcttgtgg tttatcattt cagaatctct ctccgtggca 480
 gcagaaaatc agccatattc ttattgcctg ctgtctggca gtttgggctt gaacatcgtc 540
 agtgcaatct gctctgcagt tggagtcata ctcttcatca cagatctaag tattccccac 600
 ccatatgcct accccgacta ttatccttac gcctgggggtg tgaaccctgg aatggcgatt 660
 tctggcgtgc tgctggtcct ctgcctcctg gagtttggca tcgcatgcgc atcttcccac 720
 tttggctgcc agttggtctg ctgtcaatca agcaatgtga gtgtcatcta tccaaacatc 780
 tatgcagcaa acccagtgat caccaccagaa ccggtgacct caccaccaag ttattccagt 840
 gagatccaag caaataagta a 861

<210> 1878
 <211> 286
 <212> PRT
 <213> Homo sapiens

<400> 1878
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 20 25 30
 Ile Ala Gly Gln Ile Lys Leu Met Thr Ser Ala Val Pro Val Ala Asn
 35 40 45
 Ser Val Leu Val Val Ala Pro His Asn Gly Tyr Pro Val Thr Pro Gly
 50 55 60
 Ile Met Ser His Val Pro Leu Tyr Pro Asn Ser Gln Pro Gln Val His
 65 70 75 80
 Leu Val Pro Gly Asn Pro Pro Ser Leu Val Ser Asn Val Asn Gly Gln
 85 90 95
 Pro Val Gln Lys Ala Leu Lys Glu Gly Lys Thr Leu Gly Ala Ile Gln
 100 105 110
 Ile Ile Ile Gly Leu Ala His Ile Gly Leu Gly Ser Ile Met Ala Thr
 115 120 125
 Val Leu Val Gly Glu Tyr Leu Ser Ile Ser Phe Tyr Gly Gly Phe Pro
 130 135 140
 Phe Trp Gly Gly Leu Trp Phe Ile Ile Ser Glu Ser Leu Ser Val Ala
 145 150 155 160
 Ala Glu Asn Gln Pro Tyr Ser Tyr Cys Leu Leu Ser Gly Ser Leu Gly
 165 170 175
 Leu Asn Ile Val Ser Ala Ile Cys Ser Ala Val Gly Val Ile Leu Phe
 180 185 190

Ile	Thr	Asp	Leu	Ser	Ile	Pro	His	Pro	Tyr	Ala	Tyr	Pro	Asp	Tyr	Tyr
		195					200					205			
Pro	Tyr	Ala	Trp	Gly	Val	Asn	Pro	Gly	Met	Ala	Ile	Ser	Gly	Val	Leu
	210					215					220				
Leu	Val	Phe	Cys	Leu	Leu	Glu	Phe	Gly	Ile	Ala	Cys	Ala	Ser	Ser	His
225					230					235					240
Phe	Gly	Cys	Gln	Leu	Val	Cys	Cys	Gln	Ser	Ser	Asn	Val	Ser	Val	Ile
			245					250						255	
Tyr	Pro	Asn	Ile	Tyr	Ala	Ala	Asn	Pro	Val	Ile	Thr	Pro	Glu	Pro	Val
		260					265						270		
Thr	Ser	Pro	Pro	Ser	Tyr	Ser	Ser	Glu	Ile	Gln	Ala	Asn	Lys		
		275					280					285			

<210> 1879
 <211> 186
 <212> DNA
 <213> Homo sapiens

<400> 1879
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 cagggattcg ccattccgat cgggcaggcg atggcgatcg cgggccagat caagcttcta 120
 agtattcccc acccatatgc ctaccccgac tattatcctt acgcctgggg tgtgaaccct 180
 ggaatg 186

<210> 1880
 <211> 62
 <212> PRT
 <213> Homo sapiens

Met	His	His	His	His	His	His	Thr	Ala	Ala	Ser	Asp	Asn	Phe	Gln	Leu
1				5				10					15		
Ser	Gln	Gly	Gly	Gln	Gly	Phe	Ala	Ile	Pro	Ile	Gly	Gln	Ala	Met	Ala
		20					25					30			
Ile	Ala	Gly	Gln	Ile	Lys	Leu	Leu	Ser	Ile	Pro	His	Pro	Tyr	Ala	Tyr
	35					40					45				
Pro	Asp	Tyr	Tyr	Pro	Tyr	Ala	Trp	Gly	Val	Asn	Pro	Gly	Met		
	50					55					60				

<210> 1881
 <211> 69
 <212> DNA
 <213> Homo sapiens

<400> 1881
 ctaagtattc cccacccata tgcctacccc gactattatc cttacgcctg gggtgtgaac 60
 cctggaatg 69

<210> 1882
 <211> 23
 <212> PRT
 <213> Homo sapiens

<400> 1882

Leu Ser Ile Pro His Pro Tyr Ala Tyr Pro Asp Tyr Tyr Pro Tyr Ala
 1 5 10 15
 Trp Gly Val Asn Pro Gly Met
 20

<210> 1883

<211> 6799

<212> DNA

<213> Homo sapiens

<400> 1883

gccacgtaag aagtgtcttt cgcctccgc catgattctg aggcctcccc agccatgtgc 60
 aactgcggtg ttactgctct gggcccagtg cctccctcgc tcaatggagt gacggcatcc 120
 aactcacaag acaggagact caacagaatg accaagtgga gaagacgtct aagttctcag 180
 cgggtctcagc cgaatgactg aagaggaacc agggacaggg atgactcaca tgggaagagg 240
 accccacttt gttctgtttg attctaagag gacacagact gcttcattca tttcagtttc 300
 cccagcacct ggcttaactc tcagacatgt tagacggttt gtaagcaccg gctctactga 360
 actggcatca aatcatgacc tggttcagaa gagacacgag gactggatct gttctaaaca 420
 gattgtgcaa aggggaaaga cacagactca gcatttccac agcttttaac atttcagcga 480
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 ccttcttgga gtgtgaaccc tgcctcccc taacgctccg ccgatccttc agtcatctta 1260
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 actccatgcc ccgtcccatt ctctggcaca gcctcctccc gtaggggtcag cctcagactg 1620
 caggccacat cctgggcctc ctatagggtc ageccgacct gccctgcca caactgcctt 1680
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 ccctgatgca tcccaagaca gatgctgcct tgctctcgcc tgtcccttct caacaaacga 2160
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 tgtagagaaa tccagctgat ccctcctacc cggtgaccag aatctactgc gtcctgcgga 2280
 tacaggggcc atcctccaga caatctctgt tgtcagcgcc agaagccgga acaggtcccc 2340
 cagcacctcc cctgcctcgg tgagcagcgt gtgggtctgg ccctggcctc tgcctgcacg 2400

gagcccatca cctgtaaatc cccacactgc agccctgcc cttgcttgct tgcattgtgtg 5700
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 <211> 91
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Phe Val Ser Thr Gly Ser Thr Glu Leu Ala Ser Asn His Asp Leu Val
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<210> 1885
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 1885
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 <211> 56
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 <213> Homo sapiens

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 35 40 45
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 Leu Arg Ser
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<213> Homo sapiens
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<400> 1891

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<211> 599
<212> DNA
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<400> 1892

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<210> 1893

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<212> DNA

<213> Homo sapiens

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<400> 1893

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 tcccttgctt ccccttttgc caatctcaac acccaagttg aagactttgt ttttaaaatg 2040
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<210> 1899

<211> 987

<212> DNA

<213> Homo sapiens

<400> 1899

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 ccaccccgtt ttcgtagttt tcatttagaa aatagagctt ttaaaaatgt cctgcctttt 660
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<210> 1900
 <211> 2545
 <212> DNA
 <213> Homo sapiens

<400> 1900

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aagaatggag	ttcaaacatg	tctaaaccca	gattcagcag	atgtgaagga	actgattaaa	300
aagtgggaga	aacaggtcag	ccaaaagaaa	aagcaaaaaga	atgggaaaaa	acatcaaaaa	360
aagaaagttc	tgaaagtctg	aaaatctcaa	cgttctcgtc	aaaagaagac	tacataagag	420
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tcatttatca	tatatataca	tacatgcata	cactctcaaa	gcaaataatt	tttcaactca	2460
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<210> 1901
 <211> 149
 <212> PRT

<213> Homo sapiens

<400> 1901

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			20					25					30		
Pro	Glu	Phe	Pro	Leu	Ser	Pro	Pro	Lys	Lys	Lys	Asp	Leu	Ser	Leu	Glu
		35					40					45			
Glu	Ile	Gln	Lys	Lys	Leu	Glu	Ala	Ala	Glu	Glu	Arg	Arg	Lys	Ser	His
	50					55					60				
Glu	Ala	Glu	Val	Leu	Lys	Gln	Leu	Ala	Glu	Lys	Arg	Glu	His	Glu	Lys
65					70					75					80
Glu	Val	Leu	Gln	Lys	Ala	Ile	Glu	Glu	Asn	Asn	Asn	Phe	Ser	Lys	Met
				85					90					95	
Ala	Glu	Glu	Lys	Leu	Thr	His	Lys	Met	Glu	Ala	Asn	Lys	Glu	Asn	Arg
			100					105					110		
Glu	Ala	Gln	Met	Ala	Ala	Lys	Leu	Glu	Arg	Leu	Arg	Glu	Lys	Asp	Lys
		115					120					125			
His	Ile	Glu	Glu	Val	Arg	Lys	Asn	Lys	Glu	Ser	Lys	Asp	Pro	Ala	Asp
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Glu	Thr	Glu	Ala	Asp											
145															

<210> 1902

<211> 276

<212> PRT

<213> Homo sapiens

<400> 1902

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Val	Trp	Ser	Arg	Ala	Gln	Arg	Arg	Lys	Met	Ala	Gln	Glu	Asn	Pro	Lys
			20					25					30		
Met	His	Asn	Ser	Glu	Ile	Ser	Lys	Arg	Leu	Gly	Ala	Glu	Trp	Lys	Leu
		35					40					45			
Leu	Thr	Glu	Ser	Glu	Lys	Arg	Pro	Phe	Ile	Asp	Glu	Ala	Lys	Arg	Leu
	50					55					60				
Arg	Ala	Met	His	Met	Lys	Glu	His	Pro	Asp	Tyr	Lys	Tyr	Arg	Pro	Arg
65					70				75						80
Arg	Lys	Pro	Lys	Thr	Leu	Leu	Lys	Lys	Asp	Lys	Phe	Ala	Phe	Pro	Val
				85					90					95	
Pro	Tyr	Gly	Leu	Gly	Gly	Val	Ala	Asp	Ala	Glu	His	Pro	Ala	Leu	Lys
		100					105						110		
Ala	Gly	Ala	Gly	Leu	His	Ala	Gly	Ala	Gly	Gly	Gly	Leu	Val	Pro	Glu
		115					120					125			
Ser	Leu	Leu	Ala	Asn	Pro	Glu	Lys	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala
	130					135					140				
Ala	Ala	Arg	Val	Phe	Phe	Pro	Gln	Ser	Ala	Ala	Ala	Ala	Ala	Ala	Ala
145					150				155						160
Ala	Ala	Ala	Ala	Ala	Ala	Gly	Ser	Pro	Tyr	Ser	Leu	Leu	Asp	Leu	Gly
				165					170					175	
Ser	Lys	Met	Ala	Glu	Ile	Ser	Ser	Ser	Ser	Ser	Gly	Leu	Pro	Tyr	Ala

			180					185				190					
Ser	Ser	Leu	Gly	Tyr	Pro	Thr	Ala	Gly	Ala	Gly	Ala	Phe	His	Gly	Ala		
		195					200					205					
Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Ala	Gly	Gly	His	Thr	His		
	210					215					220						
Ser	His	Pro	Ser	Pro	Gly	Asn	Pro	Gly	Tyr	Met	Ile	Pro	Cys	Asn	Cys		
225					230					235					240		
Ser	Ala	Trp	Pro	Ser	Pro	Gly	Leu	Gln	Pro	Pro	Leu	Ala	Tyr	Ile	Leu		
			245					250						255			
Leu	Pro	Gly	Met	Gly	Lys	Pro	Gln	Leu	Asp	Pro	Tyr	Pro	Ala	Ala	Tyr		
		260						265					270				
Ala	Ala	Ala	Leu														
		275															

<210> 1903

<211> 2209

<212> PRT

<213> Homo sapiens

<400> 1903

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			20					25					30				
Val	Asp	Leu	Leu	Val	Lys	Ile	Ser	Ser	Glu	Lys	Ala	Ser	Leu	Asn	Pro		
		35					40					45					
Lys	Ile	Gln	Ala	Cys	Ser	Leu	Ser	Asp	Gly	Phe	Ile	Ile	Val	Ala	Asp		
	50					55				60							
Gln	Ser	Val	Ile	Leu	Leu	Asp	Ser	Ile	Cys	Arg	Ser	Leu	Gln	Leu	His		
65					70				75						80		
Leu	Val	Phe	Asp	Thr	Glu	Val	Asp	Val	Val	Gly	Leu	Cys	Gln	Glu	Gly		
			85					90					95				
Lys	Phe	Leu	Leu	Val	Gly	Glu	Arg	Ser	Gly	Asn	Leu	His	Leu	Ile	His		
		100						105					110				
Val	Thr	Ser	Lys	Gln	Thr	Leu	Leu	Thr	Asn	Ala	Phe	Val	Gln	Lys	Ala		
	115					120						125					
Asn	Asp	Glu	Asn	Arg	Arg	Thr	Tyr	Gln	Asn	Leu	Val	Ile	Glu	Lys	Asp		
	130					135					140						
Gly	Ser	Asn	Glu	Gly	Thr	Tyr	Tyr	Met	Leu	Leu	Leu	Thr	Tyr	Ser	Gly		
145				150					155						160		
Phe	Phe	Cys	Ile	Thr	Asn	Leu	Gln	Leu	Leu	Lys	Ile	Gln	Gln	Ala	Ile		
			165					170						175			
Glu	Asn	Val	Asp	Phe	Ser	Thr	Ala	Lys	Lys	Leu	Gln	Gly	Gln	Ile	Lys		
		180					185						190				
Ser	Ser	Phe	Ile	Ser	Thr	Glu	Asn	Tyr	His	Thr	Leu	Gly	Cys	Leu	Ser		
	195					200					205						
Leu	Val	Ala	Gly	Asp	Leu	Ala	Ser	Glu	Val	Pro	Val	Ile	Ile	Gly	Gly		
	210				215						220						
Thr	Gly	Asn	Cys	Ala	Phe	Ser	Lys	Trp	Glu	Pro	Asp	Ser	Ser	Lys	Lys		
225				230					235						240		
Gly	Met	Thr	Val	Lys	Asn	Leu	Ile	Asp	Ala	Glu	Ile	Ile	Lys	Gly	Ala		
			245					250						255			
Lys	Lys	Phe	Gln	Leu	Ile	Asp	Asn	Leu	Leu	Phe	Val	Leu	Asp	Thr	Asp		

			260					265					270			
Asn	Val	Leu	Ser	Leu	Trp	Asp	Ile	Tyr	Thr	Leu	Thr	Pro	Val	Trp	Asn	
		275					280					285				
Trp	Pro	Ser	Leu	His	Val	Glu	Glu	Phe	Leu	Leu	Thr	Thr	Glu	Ala	Asp	
	290					295					300					
Ser	Pro	Ser	Ser	Val	Thr	Trp	Gln	Gly	Ile	Thr	Asn	Leu	Lys	Leu	Ile	
305					310					315					320	
Ala	Leu	Thr	Ala	Ser	Ala	Asn	Lys	Lys	Met	Lys	Asn	Leu	Met	Val	Tyr	
			325						330					335		
Ser	Leu	Pro	Thr	Met	Glu	Ile	Leu	Tyr	Ser	Leu	Glu	Val	Ser	Ser	Val	
			340					345					350			
Ser	Ser	Leu	Val	Gln	Thr	Gly	Ile	Ser	Thr	Asp	Thr	Ile	Tyr	Leu	Leu	
		355				360						365				
Glu	Gly	Val	Cys	Lys	Asn	Asp	Pro	Lys	Leu	Ser	Glu	Asp	Ser	Val	Ser	
	370					375					380					
Val	Leu	Val	Leu	Arg	Cys	Leu	Thr	Glu	Ala	Leu	Pro	Glu	Asn	Arg	Leu	
385					390					395					400	
Ser	Arg	Leu	Leu	His	Lys	His	Arg	Phe	Ala	Glu	Ala	Glu	Ser	Phe	Ala	
				405				410						415		
Ile	Gln	Phe	Gly	Leu	Asp	Val	Glu	Leu	Val	Tyr	Lys	Val	Lys	Ser	Asn	
			420					425					430			
His	Ile	Leu	Glu	Lys	Leu	Ala	Leu	Ser	Ser	Val	Asp	Ala	Ser	Glu	Gln	
		435					440					445				
Thr	Glu	Trp	Gln	Gln	Leu	Val	Asp	Asp	Ala	Lys	Glu	Asn	Leu	His	Lys	
	450					455					460					
Ile	Gln	Asp	Asp	Glu	Phe	Val	Val	Asn	Tyr	Cys	Leu	Lys	Ala	Gln	Trp	
465					470					475					480	
Ile	Thr	Tyr	Glu	Thr	Thr	Gln	Glu	Met	Leu	Asn	Tyr	Ala	Lys	Thr	Arg	
				485				490						495		
Leu	Leu	Lys	Lys	Glu	Asp	Lys	Thr	Ala	Leu	Ile	Tyr	Ser	Asp	Gly	Leu	
			500					505					510			
Lys	Glu	Val	Leu	Arg	Ala	His	Ala	Lys	Leu	Thr	Thr	Phe	Tyr	Gly	Ala	
		515					520					525				
Phe	Gly	Pro	Glu	Lys	Phe	Ser	Gly	Ser	Ser	Trp	Ile	Glu	Phe	Leu	Asn	
	530					535					540					
Asn	Glu	Asp	Asp	Leu	Lys	Asp	Ile	Phe	Leu	Gln	Leu	Lys	Glu	Gly	Asn	
545					550					555					560	
Leu	Val	Cys	Ala	Gln	Tyr	Leu	Trp	Leu	Arg	His	Arg	Ala	Asn	Phe	Glu	
			565						570					575		
Ser	Arg	Phe	Asp	Val	Lys	Met	Leu	Glu	Ser	Leu	Leu	Asn	Ser	Met	Ser	
			580					585					590			
Ala	Ser	Val	Ser	Leu	Gln	Lys	Leu	Cys	Pro	Trp	Phe	Lys	Asn	Asp	Val	
		595														

690	695	700
Lys Leu Ala Leu Ser Asp Phe Glu Lys Glu Asn Thr Thr Thr Ile Val		
705	710	715
Phe Arg Met Phe Asp Lys Val Leu Ala Pro Glu Leu Ile Pro Ser Ile		
	725	730
		735
Leu Glu Lys Phe Ile Arg Val Tyr Met Arg Glu His Asp Leu Gln Glu		
	740	745
		750
Glu Glu Leu Leu Leu Leu Tyr Ile Glu Asp Leu Leu Asn Arg Cys Ser		
	755	760
		765
Ser Lys Ser Thr Ser Leu Phe Glu Thr Ala Trp Glu Ala Lys Ala Met		
	770	775
		780
Ala Val Ile Ala Cys Leu Ser Asp Thr Asp Leu Ile Phe Asp Ala Val		
	785	790
		795
Leu Lys Ile Met Tyr Ala Ala Val Val Pro Trp Ser Ala Ala Val Glu		
	805	810
		815
Gln Leu Val Lys Gln His Leu Glu Met Asp His Pro Lys Val Lys Leu		
	820	825
		830
Leu Gln Glu Ser Tyr Lys Leu Met Glu Met Lys Lys Leu Leu Arg Gly		
	835	840
		845
Tyr Gly Ile Arg Glu Val Asn Leu Leu Asn Lys Glu Ile Met Arg Val		
	850	855
		860
Val Arg Tyr Ile Leu Lys Gln Asp Val Pro Ser Ser Leu Glu Asp Ala		
	865	870
		875
Leu Lys Val Ala Gln Ala Phe Met Leu Ser Asp Asp Glu Ile Tyr Ser		
	885	890
		895
Leu Arg Ile Ile Asp Leu Ile Asp Arg Glu Gln Gly Glu Asp Cys Leu		
	900	905
		910
Leu Leu Leu Lys Ser Leu Pro Pro Ala Glu Ala Glu Lys Thr Ala Glu		
	915	920
		925
Arg Val Ile Ile Trp Ala Arg Leu Ala Leu Gln Glu Glu Pro Asp His		
	930	935
		940
Ser Lys Glu Gly Lys Ala Trp Arg Met Ser Val Ala Lys Thr Ser Val		
	945	950
		955
Asp Ile Leu Lys Ile Leu Cys Asp Ile Gln Lys Asp Asn Leu Gln Lys		
	965	970
		975
Lys Asp Glu Cys Glu Glu Met Leu Lys Leu Phe Lys Glu Val Ala Ser		
	980	985
		990
Leu Gln Glu Asn Phe Glu Val Phe Leu Ser Phe Glu Asp Tyr Ser Asn		
	995	1000
		1005
Ser Ser Leu Val Ala Asp Leu Arg Glu Gln His Ile Lys Ala His Glu		
	1010	1015
		1020
Val Ala Gln Ala Lys His Lys Pro Gly Ser Thr Pro Glu Pro Ile Ala		
	1025	1030
		1035
Ala Glu Val Arg Ser Pro Ser Met Glu Ser Lys Leu His Arg Gln Ala		
	1045	1050
		1055
Leu Ala Leu Gln Met Ser Lys Gln Glu Leu Glu Ala Glu Leu Thr Leu		
	1060	1065
		1070
Arg Ala Leu Lys Asp Gly Asn Ile Lys Thr Ala Leu Lys Lys Cys Ser		
	1075	1080
		1085
Asp Leu Phe Lys Tyr His Cys Asn Ala Asp Thr Gly Lys Leu Leu Phe		
	1090	1095
		1100
Leu Thr Cys Gln Lys Leu Cys Gln Met Leu Ala Asp Asn Val Pro Val		
	1105	1110
		1115
Thr Val Pro Val Gly Leu Asn Leu Pro Ser Met Ile His Asp Leu Ala		

				1125					1130					1135	
Ser	Gln	Ala	Ala	Thr	Ile	Cys	Ser	Pro	Asp	Phe	Leu	Leu	Asp	Ala	Leu
				1140					1145					1150	
Glu	Leu	Cys	Lys	His	Thr	Leu	Met	Ala	Val	Glu	Leu	Ser	Arg	Gln	Cys
				1155					1160					1165	
Gln	Met	Asp	Asp	Cys	Gly	Ile	Leu	Met	Lys	Ala	Ser	Phe	Gly	Thr	His
				1170					1175					1180	
Lys	Asp	Pro	Tyr	Glu	Glu	Trp	Ser	Tyr	Ser	Asp	Phe	Phe	Ser	Glu	Asp
				1185					1190					1195	1200
Gly	Ile	Val	Leu	Glu	Ser	Gln	Met	Val	Leu	Pro	Val	Ile	Tyr	Glu	Leu
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Ile	Ser	Ser	Leu	Val	Pro	Leu	Ala	Glu	Ser	Lys	Arg	Tyr	Pro	Leu	Glu
				1220					1225					1230	
Ser	Thr	Ser	Leu	Pro	Tyr	Cys	Ser	Leu	Asn	Glu	Gly	Asp	Gly	Leu	Val
				1235					1240					1245	
Leu	Pro	Val	Ile	Asn	Ser	Ile	Ser	Ala	Leu	Leu	Gln	Asn	Leu	Gln	Glu
				1250					1255					1260	
Ser	Ser	Gln	Trp	Glu	Leu	Ala	Leu	Arg	Phe	Val	Val	Gly	Ser	Phe	Gly
				1265					1270					1275	1280
Thr	Cys	Leu	Gln	His	Ser	Val	Ser	Asn	Phe	Met	Asn	Ala	Thr	Leu	Ser
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Glu	Lys	Leu	Phe	Gly	Glu	Thr	Thr	Leu	Val	Lys	Ser	Arg	His	Val	Val
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Met	Glu	Leu	Lys	Glu	Lys	Ala	Val	Ile	Phe	Ile	Arg	Glu	Asn	Ala	Thr
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Thr	Leu	Leu	His	Lys	Val	Phe	Asn	Cys	Arg	Leu	Val	Asp	Leu	Asp	Leu
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Ala	Leu	Gly	Tyr	Cys	Thr	Leu	Leu	Pro	Gln	Lys	Asp	Val	Phe	Glu	Asn
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Leu	Trp	Lys	Leu	Ile	Asp	Lys	Ala	Trp	Gln	Asn	Tyr	Asp	Lys	Ile	Leu
				1365					1370					1375	
Ala	Ile	Ser	Leu	Val	Gly	Ser	Glu	Leu	Ala	Ser	Leu	Tyr	Gln	Glu	Ile
				1380					1385					1390	
Glu	Met	Gly	Leu	Lys	Phe	Arg	Glu	Leu	Ser	Thr	Asp	Ala	Gln	Trp	Gly
				1395					1400					1405	
Ile	Arg	Leu	Gly	Lys	Leu	Gly	Ile	Ser	Phe	Gln	Pro	Val	Phe	Arg	Gln
				1410					1415					1420	
His	Phe	Leu	Thr	Lys	Lys	Asp	Leu	Ile	Lys	Ala	Leu	Val	Glu	Asn	Ile
				1425					1430					1435	1440
Asp	Met	Asp	Thr	Ser	Leu	Ile	Leu	Glu	Tyr	Cys	Ser	Thr	Phe	Gln	Leu
				1445					1450					1455	
Asp	Cys	Asp	Ala	Val	Leu	Gln	Leu	Phe	Ile	Glu	Thr	Leu	Leu	His	Asn
				1460					1465					1470	
Thr	Asn	Ala	Gly	Gln	Gly	Gln	Gly	Asp	Ala	Ser	Met	Asp	Ser	Ala	Lys
				1475					1480					1485	
Arg	Arg	His	Pro	Lys	Leu	Leu	Ala	Lys	Ala	Leu	Glu	Met	Val	Pro	Leu
				1490					1495					1500	
Leu	Thr	Ser	Thr	Lys	Asp	Leu	Val	Ile	Ser	Leu	Ser	Gly	Ile	Leu	His
				1505					1510					1515	1520
Lys	Leu	Asp	Pro	Tyr	Asp	Tyr	Glu	Met	Ile	Glu	Val	Val	Leu	Lys	Val
				1525					1530					1535	
Ile	Glu	Arg	Ala	Asp	Glu	Lys	Ile	Thr	Asn	Ile	Asn	Ile	Asn	Gln	Ala
				1540					1545					1550	
Leu	Ser	Ile	Leu	Lys	His	Leu	Lys	Ser	Tyr	Arg	Arg	Ile	Ser	Pro	Pro

1555	1560	1565
Val Asp Leu Glu Tyr Gln	Tyr Met Leu Glu His	Val Ile Thr Leu Pro
1570	1575	1580
Ser Ala Ala Gln Thr Arg	Leu Pro Phe His Leu Ile	Phe Phe Gly Thr
1585	1590	1595
Ala Gln Asn Phe Trp Lys	Ile Leu Ser Thr Glu	Leu Ser Glu Glu Ser
1605	1610	1615
Phe Pro Thr Leu Leu Leu	Ile Ser Lys Leu Met	Lys Phe Ser Leu Asp
1620	1625	1630
Thr Leu Tyr Val Ser Thr	Ala Lys His Val Phe	Glu Lys Lys Leu Lys
1635	1640	1645
Pro Lys Leu Leu Lys Leu	Thr Gln Ala Lys Ser	Ser Thr Leu Ile Asn
1650	1655	1660
Lys Glu Ile Thr Lys Ile	Thr Gln Thr Ile Glu	Ser Cys Leu Leu Ser
1665	1670	1675
Ile Val Asn Pro Glu Trp	Ala Val Ala Ile Ala	Ile Ser Leu Ala Gln
1685	1690	1695
Asp Ile Pro Glu Gly Ser	Phe Lys Ile Ser Ala	Leu Lys Phe Cys Leu
1700	1705	1710
Tyr Leu Ala Glu Arg Trp	Leu Gln Asn Ile Pro	Ser Gln Asp Glu Lys
1715	1720	1725
Arg Glu Lys Ala Glu Ala	Leu Leu Lys Lys Leu	His Ile Gln Tyr Arg
1730	1735	1740
Arg Ser Gly Thr Glu Ala	Val Leu Ile Ala His	Lys Leu Asn Thr Glu
1745	1750	1755
Glu Tyr Leu Arg Val Ile	Gly Lys Pro Ala His	Leu Ile Val Ser Leu
1765	1770	1775
Tyr Glu His Pro Ser Ile	Asn Gln Arg Ile Gln	Asn Ser Ser Gly Thr
1780	1785	1790
Asp Tyr Pro Asp Ile His	Ala Ala Ala Lys Glu	Ile Ala Glu Val Asn
1795	1800	1805
Glu Ile Asn Leu Glu Lys	Val Trp Asp Met Leu	Leu Glu Lys Trp Leu
1810	1815	1820
Cys Pro Ser Thr Lys Pro	Gly Glu Lys Pro Ser	Glu Leu Phe Glu Leu
1825	1830	1835
Gln Glu Asp Glu Ala Leu	Arg Arg Val Gln Tyr	Leu Leu Leu Ser Arg
1845	1850	1855
Pro Ile Asp Tyr Ser Ser	Arg Met Leu Phe Val	Phe Ala Thr Ser Thr
1860	1865	1870
Thr Thr Thr Leu Gly Met	His Gln Leu Thr Phe	Ala His Arg Thr Arg
1875	1880	1885
Ala Leu Gln Cys Leu Phe	Tyr Leu Ala Asp Lys	Glu Thr Ile Glu Ser
1890	1895	1900
Leu Phe Lys Lys Pro Ile	Glu Glu Val Lys Ser	Tyr Leu Arg Cys Ile
1905	1910	1915
Thr Phe Leu Ala Ser Phe	Glu Thr Leu Asn Ile	Pro Ile Thr Tyr Glu
1925	1930	1935
Leu Phe Cys Ser Ser Pro	Lys Glu Gly Met Ile	Lys Gly Leu Trp Lys
1940	1945	1950
Asn His Ser His Glu Ser	Met Ala Val Arg Leu	Val Thr Glu Leu Cys
1955	1960	1965
Leu Glu Tyr Lys Ile Tyr	Asp Leu Gln Leu Trp	Asn Gly Leu Leu Gln
1970	1975	1980
Lys Leu Leu Gly Phe Asn	Met Ile Pro Tyr Leu	Arg Lys Val Leu Lys

1985		1990		1995		2000
Ala Ile Ser Ser	Ile His Ser Leu Trp	Gln Val Pro Tyr Phe	Ser Lys			
	2005	2010	2015			
Ala Trp Gln Arg	Val Ile Gln Ile Pro	Leu Leu Ser Ala	Ser Cys Pro			
	2020	2025	2030			
Leu Ser Pro Asp	Gln Leu Ser Asp	Cys Ser Glu Ser	Leu Ile Ala Val			
	2035	2040	2045			
Leu Glu Cys Pro	Val Ser Gly Asp	Leu Asp Leu Ile	Gly Val Ala Arg			
	2050	2055	2060			
Gln Tyr Ile Gln	Leu Glu Leu Pro	Ala Phe Ala Leu	Ala Cys Leu Met			
2065	2070	2075	2080			
Leu Met Pro His	Ser Glu Lys Arg	His Gln Gln Ile	Lys Asn Phe Leu			
	2085	2090	2095			
Gly Ser Cys Asp	Pro Gln Val Ile	Leu Lys Gln Leu	Glu Glu His Met			
	2100	2105	2110			
Asn Thr Gly Gln	Leu Ala Gly Phe	Ser His Gln Ile	Arg Ser Leu Ile			
	2115	2120	2125			
Leu Asn Asn Ile	Ile Asn Lys Lys	Glu Phe Gly Ile	Leu Ala Lys Thr			
	2130	2135	2140			
Lys Tyr Phe Gln	Met Leu Lys Met	His Ala Met Asn	Thr Asn Asn Ile			
2145	2150	2155	2160			
Thr Glu Leu Val	Asn Tyr Leu Ala	Asn Asp Leu Ser	Leu Asp Glu Ala			
	2165	2170	2175			
Ser Val Leu Ile	Thr Glu Tyr Ser	Lys His Cys Gly	Lys Pro Val Pro			
	2180	2185	2190			
Pro Asp Thr Ala	Pro Cys Glu Ile	Leu Lys Met Phe	Leu Ser Gly Leu			
	2195	2200	2205			
Ser						

<210> 1904
 <211> 197
 <212> PRT
 <213> Homo sapiens

<400> 1904
 Met Gln Arg Ala Ser Arg Leu Lys Arg Glu Leu His Met Leu Ala Thr
 1 5 10 15
 Glu Pro Pro Pro Gly Ile Thr Cys Trp Gln Asp Lys Asp Gln Met Asp
 20 25 30
 Asp Leu Arg Ala Gln Ile Leu Gly Gly Ala Asn Thr Pro Tyr Glu Lys
 35 40 45
 Gly Val Phe Lys Leu Glu Val Ile Ile Pro Glu Arg Tyr Pro Phe Glu
 50 55 60
 Pro Pro Gln Ile Arg Phe Leu Thr Pro Ile Tyr His Pro Asn Ile Asp
 65 70 75 80
 Ser Ala Gly Arg Ile Cys Leu Asp Val Leu Lys Leu Pro Pro Lys Gly
 85 90 95
 Ala Trp Arg Pro Ser Leu Asn Ile Ala Thr Val Leu Thr Ser Ile Gln
 100 105 110
 Leu Leu Met Ser Glu Pro Asn Pro Asp Asp Pro Leu Met Ala Asp Ile
 115 120 125
 Ser Ser Glu Phe Lys Tyr Asn Lys Pro Ala Phe Leu Lys Asn Ala Arg

130		135		140
Gln Trp Thr Glu Lys His	Ala Arg Gln Lys Gln	Lys Ala Asp Glu Glu		
145		150	155	160
Glu Met Leu Asp Asn Leu	Pro Glu Ala Gly Asp	Ser Arg Val His Asn		
	165	170	175	
Ser Thr Gln Lys Arg Lys	Ala Ser Gln Leu Val	Gly Ile Glu Lys Lys		
	180	185	190	
Phe His Pro Asp Val				
195				

<210> 1905
 <211> 202
 <212> PRT
 <213> Homo sapiens

<400> 1905

Met Ala Thr Leu Ile Tyr Val Asp Lys Glu Asn Gly Glu Pro Gly Thr	
1 5 10 15	
Arg Val Val Ala Lys Asp Gly Leu Lys Leu Gly Ser Gly Pro Ser Ile	
20 25 30	
Lys Ala Leu Asp Gly Arg Ser Gln Val Ser Thr Pro Arg Phe Gly Lys	
35 40 45	
Thr Phe Asp Ala Pro Pro Ala Leu Pro Lys Ala Thr Arg Lys Ala Leu	
50 55 60	
Gly Thr Val Asn Arg Ala Thr Glu Lys Ser Val Lys Thr Lys Gly Pro	
65 70 75 80	
Leu Lys Gln Lys Gln Pro Ser Phe Ser Ala Lys Lys Met Thr Glu Lys	
85 90 95	
Thr Val Lys Ala Lys Ser Ser Val Pro Ala Ser Asp Asp Ala Tyr Pro	
100 105 110	
Glu Ile Glu Lys Phe Phe Pro Phe Asn Pro Leu Asp Phe Glu Ser Phe	
115 120 125	
Asp Leu Pro Glu Glu His Gln Ile Ala His Leu Pro Leu Ser Gly Val	
130 135 140	
Pro Leu Met Ile Leu Asp Glu Glu Arg Glu Leu Glu Lys Leu Phe Gln	
145 150 155 160	
Leu Gly Pro Pro Ser Pro Val Lys Met Pro Ser Pro Pro Trp Glu Ser	
165 170 175	
Asn Leu Leu Gln Ser Pro Ser Ser Ile Leu Ser Thr Leu Asp Val Glu	
180 185 190	
Leu Pro Pro Val Cys Cys Asp Ile Asp Ile	
195 200	

<210> 1906
 <211> 464
 <212> PRT
 <213> Homo sapiens

<400> 1906

Met Glu Thr Leu Ser Phe Pro Arg Tyr Asn Ile Ala Glu Ile Val Val	
1 5 10 15	
His Ile Arg Asn Lys Leu Leu Thr Gly Ala Asp Gly Lys Asn Leu Ser	

			20					25					30			
Lys	Ser	Asp	Phe	Leu	Pro	Asn	Pro	Lys	Pro	Glu	Val	Leu	Tyr	Met	Ile	
		35					40					45				
Tyr	Met	Arg	Ala	Leu	Gln	Leu	Val	Tyr	Gly	Val	Arg	Leu	Glu	His	Phe	
	50					55					60					
Tyr	Met	Met	Pro	Val	Asn	Ile	Glu	Val	Met	Tyr	Pro	His	Ile	Met	Glu	
65					70					75					80	
Gly	Phe	Leu	Pro	Val	Ser	Asn	Leu	Phe	Phe	His	Leu	Asp	Ser	Phe	Met	
				85					90					95		
Pro	Ile	Cys	Arg	Val	Asn	Asp	Phe	Glu	Ile	Ala	Asp	Ile	Leu	Tyr	Pro	
			100					105					110			
Lys	Ala	Asn	Arg	Thr	Ser	Arg	Phe	Leu	Ser	Gly	Ile	Ile	Asn	Phe	Ile	
		115					120					125				
His	Phe	Arg	Glu	Thr	Cys	Leu	Glu	Lys	Tyr	Glu	Glu	Phe	Leu	Leu	Gln	
	130					135					140					
Asn	Lys	Ser	Ser	Val	Asp	Lys	Ile	Gln	Gln	Leu	Ser	Asn	Ala	His	Gln	
145					150					155					160	
Glu	Ala	Leu	Met	Lys	Leu	Glu	Lys	Leu	Asn	Ser	Val	Pro	Val	Glu	Glu	
				165					170					175		
Gln	Glu	Glu	Phe	Lys	Gln	Leu	Lys	Asp	Asp	Ile	Gln	Glu	Leu	Gln	His	
			180					185					190			
Leu	Leu	Asn	Gln	Asp	Phe	Arg	Gln	Lys	Thr	Thr	Leu	Leu	Gln	Glu	Arg	
		195					200					205				
Tyr	Thr	Lys	Met	Lys	Ser	Asp	Phe	Ser	Glu	Lys	Thr	Lys	His	Val	Asn	
	210					215					220					
Glu	Leu	Lys	Leu	Ser	Val	Val	Ser	Leu	Lys	Glu	Val	Gln	Asp	Ser	Leu	
225					230					235					240	
Lys	Ser	Lys	Ile	Val	Asp	Ser	Pro	Glu	Lys	Leu	Lys	Asn	Tyr	Lys	Glu	
			245						250				255			
Lys	Met	Lys	Asp	Thr	Val	Gln	Lys	Leu	Arg	Ser	Ala	Arg	Glu	Glu	Val	
			260					265					270			
Met	Glu	Lys	Tyr	Asp	Ile	Tyr	Arg	Asp	Ser	Val	Asp	Cys	Leu	Pro	Ser	
		275					280					285				
Cys	Gln	Leu	Glu	Val	Gln	Leu	Tyr	Gln	Lys	Lys	Ser	Gln	Asp	Leu	Ala	
	290					295					300					
Asp	Asn	Arg	Glu	Lys	Leu	Ser	Ser	Ile	Leu	Lys	Glu	Ser	Leu	Asn	Leu	
305					310					315					320	
Glu	Gly	Gln	Ile	Asp	Ser	Asp	Ser	Ser	Glu	Leu	Lys	Lys	Leu	Lys	Thr	
				325					330					335		
Glu	Glu	Asn	Ser	Leu	Ile	Arg	Leu	Met	Thr	Leu	Lys	Lys	Glu	Arg	Leu	
			340					345					350			
Ala	Thr	Met	Gln	Phe	Lys	Ile	Asn	Lys	Lys	Gln	Glu	Asp	Val	Lys	Gln	
		355					360									

450

455

460

<210> 1907
 <211> 168
 <212> PRT
 <213> Homo sapiens

<400> 1907
 Met Ala Glu Pro Trp Gly Asn Glu Leu Ala Ser Ala Ala Ala Arg Gly
 1 5 10 15
 Asp Leu Glu Gln Leu Thr Ser Leu Leu Gln Asn Asn Val Asn Val Asn
 20 25 30
 Ala Gln Asn Gly Phe Gly Arg Thr Ala Leu Gln Val Met Lys Leu Gly
 35 40 45
 Asn Pro Glu Ile Ala Arg Arg Leu Leu Leu Arg Gly Ala Asn Pro Asp
 50 55 60
 Leu Lys Asp Arg Thr Gly Phe Ala Val Ile His Asp Ala Ala Arg Ala
 65 70 75 80
 Gly Phe Leu Asp Thr Leu Gln Thr Leu Leu Glu Phe Gln Ala Asp Val
 85 90 95
 Asn Ile Glu Asp Asn Glu Gly Asn Leu Pro Leu His Leu Ala Ala Lys
 100 105 110
 Glu Gly His Leu Arg Val Val Glu Phe Leu Val Lys His Thr Ala Ser
 115 120 125
 Asn Val Gly His Arg Asn His Lys Gly Asp Thr Ala Cys Asp Leu Ala
 130 135 140
 Arg Leu Tyr Gly Arg Asn Glu Val Val Ser Leu Met Gln Ala Asn Gly
 145 150 155 160
 Ala Gly Gly Ala Thr Asn Leu Gln
 165

<210> 1908
 <211> 156
 <212> PRT
 <213> Homo sapiens

<400> 1908
 Met Glu Pro Ala Ala Gly Ser Ser Met Glu Pro Ser Ala Asp Trp Leu
 1 5 10 15
 Ala Thr Ala Ala Ala Arg Gly Arg Val Glu Glu Val Arg Ala Leu Leu
 20 25 30
 Glu Ala Gly Ala Leu Pro Asn Ala Pro Asn Ser Tyr Gly Arg Arg Pro
 35 40 45
 Ile Gln Val Met Met Met Gly Ser Ala Arg Val Ala Glu Leu Leu Leu
 50 55 60
 Leu His Gly Ala Glu Pro Asn Cys Ala Asp Pro Ala Thr Leu Thr Arg
 65 70 75 80
 Pro Val His Asp Ala Ala Arg Glu Gly Phe Leu Asp Thr Leu Val Val
 85 90 95
 Leu His Arg Ala Gly Ala Arg Leu Asp Val Arg Asp Ala Trp Gly Arg
 100 105 110
 Leu Pro Val Asp Leu Ala Glu Glu Leu Gly His Arg Asp Val Ala Arg

		115					120				125								
Tyr	Leu	Arg	Ala	Ala	Ala	Gly	Gly	Thr	Arg	Gly	Ser	Asn	His	Ala	Arg				
	130					135					140								
Ile	Asp	Ala	Ala	Glu	Gly	Pro	Ser	Asp	Ile	Pro	Asp								
145					150					155									

<210> 1909
 <211> 125
 <212> PRT
 <213> Homo sapiens

<400> 1909																			
Met	Lys	Lys	Ser	Gly	Val	Leu	Phe	Leu	Leu	Gly	Ile	Ile	Leu	Leu	Val				
1				5				10					15						
Leu	Ile	Gly	Val	Gln	Gly	Thr	Pro	Val	Val	Arg	Lys	Gly	Arg	Cys	Ser				
			20					25					30						
Cys	Ile	Ser	Thr	Asn	Gln	Gly	Thr	Ile	His	Leu	Gln	Ser	Leu	Lys	Asp				
		35					40					45							
Leu	Lys	Gln	Phe	Ala	Pro	Ser	Pro	Ser	Cys	Glu	Lys	Ile	Glu	Ile	Ile				
	50					55					60								
Ala	Thr	Leu	Lys	Asn	Gly	Val	Gln	Thr	Cys	Leu	Asn	Pro	Asp	Ser	Ala				
65					70					75					80				
Asp	Val	Lys	Glu	Leu	Ile	Lys	Lys	Trp	Glu	Lys	Gln	Val	Ser	Gln	Lys				
				85					90					95					
Lys	Lys	Gln	Lys	Asn	Gly	Lys	Lys	His	Gln	Lys	Lys	Lys	Val	Leu	Lys				
			100					105					110						
Val	Arg	Lys	Ser	Gln	Arg	Ser	Arg	Gln	Lys	Lys	Thr	Thr							
		115					120					125							

<210> 1910
 <211> 931
 <212> DNA
 <213> Homo sapiens

<400> 1910						
caacagtcag	aggctcgcgca	ggcgctggta	ccccgttggt	ccgcgcgcttg	ctgcgcttggtg	60
aggggtgtca	gctcagtgca	tcccaggcag	ctcttagtgt	ggagcagtgga	actgtgtgtg	120
gttccttcta	cttggggatc	atgcagagag	cttcrcgtct	gaagagagag	ctgcacatgt	180
tagccacaga	gccaccccca	ggcatcacat	gttggcaaga	taaagaccaa	atggatgacc	240
tgcgagctca	aatattaggt	ggagccaaca	caccttatga	gaaaggtgtt	tttaagctag	300
aagttatcat	tcctgagagg	tacccatttg	aacctcctca	gatccgattt	ctcactccaa	360
tttatcatcc	aaacattgat	tctgctggaa	ggatttgtct	ggatgttctc	aaattgccac	420
caaaaggtgc	ttggagacca	tccctcaaca	tcgcaactgt	gttgacctct	attcagctgc	480
tcatgtcaga	acccaaccct	gatgacccgc	tcatggctga	catatcctca	gaatttaa	540
ataataagcc	agccttcctc	aagaatgcca	gacagtggac	agagaagcat	gcaagacaga	600
aacaaaaggc	tgatgaggaa	gagatgcttg	ataatctacc	agaggctggt	gactccagag	660
tacacaactc	aacacagaaa	aggaaggcca	gtcagctagt	aggcatagaa	aagaaatttc	720
atcctgatgt	ttaggggact	tgctctgggt	catcttaggt	aatgtgttct	ttgccaaagg	780
gatctaagtt	gcctaccttg	aatttttttt	taaatatatt	tgatgacata	atttttgtgt	840
agtttatatta	tcttgtacat	atgtattttg	aatcttttta	aacctgaaaa	ataaatagtc	900
atttaaatggt	gaaaaaaaaa	aaaaaaaaaa	a			931

<220>
<223> PCR primer

27

<220>
<223> PCR primer

37

<400> 1913															
Met	Gln	His	His	His	His	His	His	Ala	Lys	Gly	Asp	Pro	Lys	Lys	Pro
1				5					10					15	
Lys	Gly	Lys	Met	Ser	Ala	Tyr	Ala	Phe	Phe	Val	Gln	Thr	Cys	Arg	Glu
			20					25					30		
Glu	His	Lys	Lys	Lys	Asn	Pro	Glu	Val	Pro	Val	Asn	Phe	Ala	Glu	Phe
		35					40					45			
Ser	Lys	Lys	Cys	Ser	Glu	Arg	Trp	Lys	Thr	Met	Ser	Gly	Lys	Glu	Lys
	50					55					60				
Ser	Lys	Phe	Asp	Glu	Met	Ala	Lys	Ala	Asp	Lys	Val	Arg	Tyr	Asp	Arg
65					70					75					80
Glu	Met	Lys	Asp	Tyr	Gly	Pro	Ala	Lys	Gly	Gly	Lys	Lys	Lys	Lys	Asp
				85					90					95	
Pro	Asn	Ala	Pro	Lys	Arg	Pro	Pro	Ser	Gly	Phe	Phe	Leu	Phe	Cys	Ser
			100					105					110		
Glu	Phe	Arg	Pro	Lys	Ile	Lys	Ser	Thr	Asn	Pro	Gly	Ile	Ser	Ile	Gly
		115				120						125			
Asp	Val	Ala	Lys	Lys	Leu	Gly	Glu	Met	Trp	Asn	Asn	Leu	Asn	Asp	Ser
	130					135					140				
Glu	Lys	Gln	Pro	Tyr	Ile	Thr	Lys	Ala	Ala	Lys	Leu	Lys	Glu	Lys	Tyr
145					150					155					160
Glu	Lys	Asp	Val	Ala	Asp	Tyr	Lys	Ser	Lys	Gly	Lys	Phe	Asp	Gly	Ala
				165					170					175	
Lys	Gly	Pro	Ala	Lys	Val	Ala	Arg	Lys	Lys	Val	Glu	Glu	Glu	Asp	Glu
			180					185					190		
Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Glu	Asp	Glu	
		195					200					205			

<210> 1914
 <211> 624
 <212> DNA
 <213> Homo sapiens

<400> 1914
 atgcagcatc accaccatca ccacgctaaa ggtgacccca agaaacccaaa gggcaagatg 60
 tccgcttatg ccttctttgt gcagacatgc agagaagaac ataagaagaa aaaccagag 120
 gtccctgtca attttgcgga attttccaag aagtgtctctg agagggtggaa gacgatgtcc 180
 gggaaagaga aatctaaatt tgatgaaatg gcaaaggcag ataaagtgcg ctatgatcgg 240
 gaaatgaagg attatggacc agctaaggga ggcaagaaga agaaggatcc taatgctccc 300
 aaaaggccac cgtctggatt cttcctgttc tgttcagaat tccgccccaa gatcaaatac 360
 acaaaccctg gcattctctat tggagacgtg gcaaaaaagc tgggtgagat gtggaataat 420
 ttaaatagaca gtgaaaagca gccttacatc actaaggcgg caaagctgaa ggagaagtat 480
 gagaaggatg ttgctgacta taagtcgaaa ggaaagtgtg atggtgcaaa ggggccagct 540
 aaagttgccg ggaaaaaggt ggaagaggaa gatgaagaag aggaggagga agaagaggag 600
 gaggaggagg aggaggatga ataa 624

<210> 1915
 <211> 28
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 1915
 gtgacgatgg aggagctgcg ggagatgg 28

<210> 1916
 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 1916
 cgcctaactc gagtcactaa cagctgggag 30

<210> 1917
 <211> 401
 <212> PRT
 <213> Homo sapiens

<400> 1917
 Met Gln His His His His His Val Thr Met Glu Glu Leu Arg Glu
 1 5 10 15
 Met Asp Cys Ser Val Leu Lys Arg Leu Met Asn Arg Asp Glu Asn Gly
 20 25 30
 Gly Gly Ala Gly Gly Ser Gly Ser His Gly Thr Leu Gly Leu Pro Ser
 35 40 45

Gly	Gly	Lys	Cys	Leu	Leu	Leu	Asp	Cys	Arg	Pro	Phe	Leu	Ala	His	Ser
50						55					60				
Ala	Gly	Tyr	Ile	Leu	Gly	Ser	Val	Asn	Val	Arg	Cys	Asn	Thr	Ile	Val
65					70					75					80
Arg	Arg	Arg	Ala	Lys	Gly	Ser	Val	Ser	Leu	Glu	Gln	Ile	Leu	Pro	Ala
				85						90					95
Glu	Glu	Glu	Val	Arg	Ala	Arg	Leu	Arg	Ser	Gly	Leu	Tyr	Ser	Ala	Val
			100					105						110	
Ile	Val	Tyr	Asp	Glu	Arg	Ser	Pro	Arg	Ala	Glu	Ser	Leu	Arg	Glu	Asp
		115					120						125		
Ser	Thr	Val	Ser	Leu	Val	Val	Gln	Ala	Leu	Arg	Arg	Asn	Ala	Glu	Arg
	130					135					140				
Thr	Asp	Ile	Cys	Leu	Leu	Lys	Gly	Gly	Tyr	Glu	Arg	Phe	Ser	Ser	Glu
145					150					155					160
Tyr	Pro	Glu	Phe	Cys	Ser	Lys	Thr	Lys	Ala	Leu	Ala	Ala	Ile	Pro	Pro
				165					170						175
Pro	Val	Pro	Pro	Ser	Ala	Thr	Glu	Pro	Leu	Asp	Leu	Gly	Cys	Ser	Ser
			180					185							190
Cys	Gly	Thr	Pro	Leu	His	Asp	Gln	Gly	Gly	Pro	Val	Glu	Ile	Leu	Pro
		195					200								205
Phe	Leu	Tyr	Leu	Gly	Ser	Ala	Tyr	His	Ala	Ala	Arg	Arg	Asp	Met	Leu
	210					215					220				
Asp	Ala	Leu	Gly	Ile	Thr	Ala	Leu	Leu	Asn	Val	Ser	Ser	Asp	Cys	Pro
225					230					235					240
Asn	His	Phe	Glu	Gly	His	Tyr	Gln	Tyr	Lys	Cys	Ile	Pro	Val	Glu	Asp
			245						250					255	
Asn	His	Lys	Ala	Asp	Ile	Ser	Ser	Trp	Phe	Met	Glu	Ala	Ile	Glu	Tyr
			260					265						270	
Ile	Asp	Ala	Val	Lys	Asp	Cys	Arg	Gly	Arg	Val	Leu	Val	His	Cys	Gln
		275					280					285			
Ala	Gly	Ile	Ser	Arg	Ser	Ala	Thr	Ile	Cys	Leu	Ala	Tyr	Leu	Met	Met
	290					295					300				
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<210> 1918

<211> 1209

<212> DNA

<213> Homo sapiens

<400> 1918

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<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 1919

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23

<210> 1920

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 1920

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35

<210> 1921

<211> 167

<212> PRT

<213> Homo sapiens

<400> 1921

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10

15

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20

25

30

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<210> 1922

<211> 507

<212> DNA

<213> Homo sapiens

<400> 1922

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<210> 1923

<211> 3192

<212> DNA

<213> Homo sapiens

<400> 1923

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<210> 1924

<211> 2048

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

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<223> n = A,T,C or G

<400> 1924

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<210> 1925

<211> 456

<212> PRT

<213> Homo sapiens

<400> 1925

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<210> 1926

<211> 324

<212> PRT

<213> Homo sapiens

<400> 1926

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Leu	Ala	Thr	Cys	Leu	Leu	Asp	Leu	Leu	Pro	Asp	Tyr	Leu	Ala	Ala	Ile
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Gly	Ala	Ala	Leu	Ala	Glu	Ser	Ala	Gly	Pro	Leu	His	Gln	Leu	Ala	Gln
			260					265						270	
Ser	Val	Leu	Glu	Gly	Met	Ala	Ala	Gly	Thr	Phe	Leu	Tyr	Ile	Thr	Phe
		275					280					285			
Leu	Glu	Ile	Leu	Pro	Gln	Glu	Leu	Ala	Ser	Ser	Glu	Gln	Arg	Ile	Leu
	290					295					300				
Lys	Val	Ile	Leu	Leu	Leu	Ala	Gly	Phe	Ala	Leu	Leu	Thr	Gly	Leu	Leu
305					310					315					320
Phe	Ile	Gln	Ile												

<210> 1927

<211> 15

<212> PRT

<213> Homo sapiens

<400> 1927

Gly	Pro	Arg	Ser	Gly	Gly	Ala	Gln	Ala	Lys	Leu	Gly	Cys	Cys	Trp
1				5					10					15

<210> 1928
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1928
 Lys Val Ile Cys Lys Ser Cys Ile Ser Gln Thr Pro Gly Ile Asn Leu
 1 5 10 15
 Asp Leu Gly Ser
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<210> 1929
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1929
 Ile Ile Pro Lys Glu Glu His Cys Lys Met Pro Glu Ala Gly Glu Glu
 1 5 10 15
 Gln Pro Gln Val
 20

<210> 1930
 <211> 24
 <212> PRT
 <213> Homo sapiens

<400> 1930
 Leu Ser Ile Pro His Pro Tyr Ala Tyr Pro Asp Tyr Tyr Pro Tyr Ala
 1 5 10 15
 Trp Phe Gly Val Asn Pro Gly Met
 20

<210> 1931
 <211> 1526
 <212> DNA
 <213> Homo sapiens

<400> 1931
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 ggtgaatgac tttgagactg ctgatattct atgtccaaaa gcaaaacgga caagtcgggtt 180
 ttttaagtggc attatcaact ttattcactt cagagaagca tgccgtgaaa cgtatatgga 240
 atttcttttg caatataaat cctctgcgga caaaatgcaa cagttaaacg ccgcacacca 300
 ggaggcatta atgaaactgg agagacttga ttctgttcca gttgaagagc aagaagagtt 360
 caagcagctt tcagatggaa ttcaggagct acaacaatca ctaaatcagg attttcatca 420
 aaaaacgata gtgctgcaag agggaaattc ccaaaagaag tcaaataattt cagagaaaac 480
 caagcgtttg aatgaactaa aattgttggg ggtttctttg aaagaaatac aagagagttt 540
 gaaaacaaaa attgtggatt ctccagagaa gttaaagaat tataaagaaa aaatgaaaga 600
 tacgggtccag aagcttaaaa atgccagaca agaagtgggt gagaaatatg aaatctatgg 660
 agactcagtt gactgcctgc cttcatgtca gttggaagtg cagttatatc aaaagaaaat 720

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acaggacctt tcagataata gggaaaaaatt agccagtatc ttaaaggaga gcctgaactt 780
ggaggaccaa attgagagtg atgagtcaga actgaagaaa ttgaagactg aagaaaattc 840
gttcaaaaaga ctgatgattg tgaagaagga aaaacttgcc acagcacaat tcaaaaataaa 900
taagaagcat gaagatgtta agcaatacaa acgcacagta attgaggatt gcaataaagt 960
tcaagaaaaa agaggtgctg tctatgaacg agtaaccaca attaatacaag aaatccaaaa 1020
aattaaactt ggaattcaac aactaaaaga tgctgctgaa agggagaaac tgaagtccca 1080
ggaaatattt ctaaacttga aaactgcttt ggagaaatac cacgacggta ttgaaaaggc 1140
agcagaggac tcctatgcta agatagatga gaagacagct gaactgaaga ggaagatgtt 1200
caaatgtca acctgattaa caaaattaca tgtctttttg taaatggctt gccatctttt 1260
aatttttctat ttagaaagaa aagttgaagc gaatggaagt atcagaagta ccaaataatg 1320
ttggcttcat cagtttttat acactctcat aagtagttaa taagatgaat ttaatgtagg 1380
cttttattaa tttataatta aaataacttg tgcagctatt catgtctcta ctctgccctt 1440
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tgttaaaaaa aaaaaaaaaa aaaaaa 1526

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<210> 1932

<211> 404

<212> PRT

<213> Homo sapiens

<400> 1932

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Leu Glu His Phe Tyr Met Met Pro Val Asn Ser Glu Val Met Tyr Pro
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His Leu Met Glu Gly Phe Leu Pro Phe Ser Asn Leu Val Thr His Leu
20          25          30
Asp Ser Phe Leu Pro Ile Cys Arg Val Asn Asp Phe Glu Thr Ala Asp
35          40          45
Ile Leu Cys Pro Lys Ala Lys Arg Thr Ser Arg Phe Leu Ser Gly Ile
50          55          60
Ile Asn Phe Ile His Phe Arg Glu Ala Cys Arg Glu Thr Tyr Met Glu
65          70          75          80
Phe Leu Trp Gln Tyr Lys Ser Ser Ala Asp Lys Met Gln Gln Leu Asn
85          90          95
Ala Ala His Gln Glu Ala Leu Met Lys Leu Glu Arg Leu Asp Ser Val
100         105         110
Pro Val Glu Glu Gln Glu Glu Phe Lys Gln Leu Ser Asp Gly Ile Gln
115         120         125
Glu Leu Gln Gln Ser Leu Asn Gln Asp Phe His Gln Lys Thr Ile Val
130         135         140
Leu Gln Glu Gly Asn Ser Gln Lys Lys Ser Asn Ile Ser Glu Lys Thr
145         150         155         160
Lys Arg Leu Asn Glu Leu Lys Leu Leu Val Val Ser Leu Lys Glu Ile
165         170         175
Gln Glu Ser Leu Lys Thr Lys Ile Val Asp Ser Pro Glu Lys Leu Lys
180         185         190
Asn Tyr Lys Glu Lys Met Lys Asp Thr Val Gln Lys Leu Lys Asn Ala
195         200         205
Arg Gln Glu Val Val Glu Lys Tyr Glu Ile Tyr Gly Asp Ser Val Asp
210         215         220
Cys Leu Pro Ser Cys Gln Leu Glu Val Gln Leu Tyr Gln Lys Lys Ile
225         230         235         240
Gln Asp Leu Ser Asp Asn Arg Glu Lys Leu Ala Ser Ile Leu Lys Glu
245         250         255
Ser Leu Asn Leu Glu Asp Gln Ile Glu Ser Asp Glu Ser Glu Leu Lys

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			260					265					270				
Lys	Leu	Lys	Thr	Glu	Glu	Asn	Ser	Phe	Lys	Arg	Leu	Met	Ile	Val	Lys		
		275					280					285					
Lys	Glu	Lys	Leu	Ala	Thr	Ala	Gln	Phe	Lys	Ile	Asn	Lys	Lys	His	Glu		
	290					295					300						
Asp	Val	Lys	Gln	Tyr	Lys	Arg	Thr	Val	Ile	Glu	Asp	Cys	Asn	Lys	Val		
305					310					315					320		
Gln	Glu	Lys	Arg	Gly	Ala	Val	Tyr	Glu	Arg	Val	Thr	Thr	Ile	Asn	Gln		
				325					330					335			
Glu	Ile	Gln	Lys	Ile	Lys	Leu	Gly	Ile	Gln	Gln	Leu	Lys	Asp	Ala	Ala		
			340					345					350				
Glu	Arg	Glu	Lys	Leu	Lys	Ser	Gln	Glu	Ile	Phe	Leu	Asn	Leu	Lys	Thr		
		355				360						365					
Ala	Leu	Glu	Lys	Tyr	His	Asp	Gly	Ile	Glu	Lys	Ala	Ala	Glu	Asp	Ser		
	370					375					380						
Tyr	Ala	Lys	Ile	Asp	Glu	Lys	Thr	Ala	Glu	Leu	Lys	Arg	Lys	Met	Phe		
385					390					395					400		
Lys	Met	Ser	Thr														

<210> 1933

<211> 1836

<212> DNA

<213> Homo sapiens

<400> 1933

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aaacttccaa gatggaaact ttgtctttcc ccagatataa tgtagctgag attgtgattc 180
atattcgcaa taagatctta acaggagctg atggtaaaaa cctcaccaag aatgatcttt 240
atccaaatcc aaagcctgaa gtcttgacac tgatctacat gagagcctta caaatagtat 300
atggaattcg actggaacat ttttacatga tgccagtga ctctgaagtc atgtatccac 360
atttaatgga aggcttctta ccattcagca atttagttac tcatctggac tcatttttgc 420
ctatctgccg ggtgaatgac tttgagactg ctgatattct atgtccaaaa gcaaaacgga 480
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cgtatatgga atttcttttg caatataaat cctctgcgga caaaatgcaa cagttaaacg 600
ccgcacacca ggaggcatta atgaaactgg agagacttga ttctgttcca gttgaagagc 660
aagaagagtt caagcagctt tcagatggta ttcaggagct acaacaatca ctaaatacagg 720
atthttcatca aaaaacgata gtgctgcaag agggaaattc ccaaaagaag tcaaatattt 780
cagagaaaac caagcgtttg aatgaactaa aattgttggg ggthttctttg aaagaaatac 840
aagagagttt gaaaacaaaa attgtggatt ctccagagaa gttaaagaat tataaagaaa 900
aaatgaaaga tacggtccag aagcttaaaa atgccagaca agaagtgggt gagaaatatg 960
aaatctatgg agactcagtt gactgcctgc cttcatgtca gttggaagtg cagttatatc 1020
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gcctgaactt ggaggaccaa attgagagtg atgagtcaga actgaagaaa ttgaagactg 1140
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tcaaaataaa taagaagcat gaagatgtta agcaatacaa acgcacagta attgaggatt 1260
gcaataaagt tcaagaaaaa agagggtgctg tctatgaacg agtaaccaca attaatcaag 1320
aaatccaaaa aattaaactt ggaattcaac aactaaaaga tgctgctgaa agggagaaaac 1380
tgaagtccca ggaaatattt ctaaacttga aaactgcttt ggagaaatac cacgacggta 1440
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ggaagatggt caaaatgtca acctgattaa caaaattaca tgtctttttg taaatggctt 1560
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ccaaataatg ttggcttcat cagtttttat acactctcat aagtagttaa taagatgaat 1680
ttaatgtagg cttttattaa ttataatta aaataacttg tgcagctatt catgtctcta 1740
ctctgcccct tggtgtaaag agtttgagta aaacaaaact agttaccttt gaaatatata 1800
tatttttttc tgtaaaaaaa aaaaaaaaaa aaaaaa 1836

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<210> 1934

<211> 464

<212> PRT

<213> Homo sapiens

<400> 1934

Met	Glu	Thr	Leu	Ser	Phe	Pro	Arg	Tyr	Asn	Val	Ala	Glu	Ile	Val	Ile
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His	Ile	Arg	Asn	Lys	Ile	Leu	Thr	Gly	Ala	Asp	Gly	Lys	Asn	Leu	Thr
			20					25					30		
Lys	Asn	Asp	Leu	Tyr	Pro	Asn	Pro	Lys	Pro	Glu	Val	Leu	His	Met	Ile
		35					40					45			
Tyr	Met	Arg	Ala	Leu	Gln	Ile	Val	Tyr	Gly	Ile	Arg	Leu	Glu	His	Phe
	50					55					60				
Tyr	Met	Met	Pro	Val	Asn	Ser	Glu	Val	Met	Tyr	Pro	His	Leu	Met	Glu
65					70					75					80
Gly	Phe	Leu	Pro	Phe	Ser	Asn	Leu	Val	Thr	His	Leu	Asp	Ser	Phe	Leu
				85					90					95	
Pro	Ile	Cys	Arg	Val	Asn	Asp	Phe	Glu	Thr	Ala	Asp	Ile	Leu	Cys	Pro
			100					105					110		
Lys	Ala	Lys	Arg	Thr	Ser	Arg	Phe	Leu	Ser	Gly	Ile	Ile	Asn	Phe	Ile
		115					120					125			
His	Phe	Arg	Glu	Ala	Cys	Arg	Glu	Thr	Tyr	Met	Glu	Phe	Leu	Trp	Gln
	130					135					140				
Tyr	Lys	Ser	Ser	Ala	Asp	Lys	Met	Gln	Gln	Leu	Asn	Ala	Ala	His	Gln
145					150					155					160
Glu	Ala	Leu	Met	Lys	Leu	Glu	Arg	Leu	Asp	Ser	Val	Pro	Val	Glu	Glu
				165					170					175	
Gln	Glu	Glu	Phe	Lys	Gln	Leu	Ser	Asp	Gly	Ile	Gln	Glu	Leu	Gln	Gln
			180					185					190		
Ser	Leu	Asn	Gln	Asp	Phe	His	Gln	Lys	Thr	Ile	Val	Leu	Gln	Glu	Gly
		195					200					205			
Asn	Ser	Gln	Lys	Lys	Ser	Asn	Ile	Ser	Glu	Lys	Thr	Lys	Arg	Leu	Asn
	210					215					220				
Glu	Leu	Lys	Leu	Leu	Val	Val	Ser	Leu	Lys	Glu	Ile	Gln	Glu	Ser	Leu
225					230					235					240
Lys	Thr	Lys	Ile	Val	Asp	Ser	Pro	Glu	Lys	Leu	Lys	Asn	Tyr	Lys	Glu
			245						250					255	
Lys	Met	Lys	Asp	Thr	Val	Gln	Lys	Leu	Lys	Asn	Ala	Arg	Gln	Glu	Val
			260					265					270		
Val	Glu	Lys	Tyr	Glu	Ile	Tyr	Gly	Asp	Ser	Val	Asp	Cys	Leu	Pro	Ser
		275					280					285			
Cys	Gln	Leu	Glu	Val	Gln	Leu	Tyr	Gln	Lys	Lys	Ile	Gln	Asp	Leu	Ser
	290					295					300				
Asp	Asn	Arg	Glu	Lys	Leu	Ala	Ser	Ile	Leu	Lys	Glu	Ser	Leu	Asn	Leu
305					310					315					320
Glu	Asp	Gln	Ile	Glu	Ser	Asp	Glu	Ser	Glu	Leu	Lys	Lys	Leu	Lys	Thr
			325						330					335	
Glu	Glu	Asn	Ser	Phe	Lys	Arg	Leu	Met	Ile	Val	Lys	Lys	Glu	Lys	Leu

			340					345					350				
Ala	Thr	Ala	Gln	Phe	Lys	Ile	Asn	Lys	Lys	His	Glu	Asp	Val	Lys	Gln		
		355					360					365					
Tyr	Lys	Arg	Thr	Val	Ile	Glu	Asp	Cys	Asn	Lys	Val	Gln	Glu	Lys	Arg		
	370					375					380						
Gly	Ala	Val	Tyr	Glu	Arg	Val	Thr	Thr	Ile	Asn	Gln	Glu	Ile	Gln	Lys		
385					390					395					400		
Ile	Lys	Leu	Gly	Ile	Gln	Gln	Leu	Lys	Asp	Ala	Ala	Glu	Arg	Glu	Lys		
			405					410						415			
Leu	Lys	Ser	Gln	Glu	Ile	Phe	Leu	Asn	Leu	Lys	Thr	Ala	Leu	Glu	Lys		
			420					425					430				
Tyr	His	Asp	Gly	Ile	Glu	Lys	Ala	Ala	Glu	Asp	Ser	Tyr	Ala	Lys	Ile		
		435					440					445					
Asp	Glu	Lys	Thr	Ala	Glu	Leu	Lys	Arg	Lys	Met	Phe	Lys	Met	Ser	Thr		
	450					455					460						

<210> 1935

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 1935

ctatgttggc atgcggtgcc acgccc

26

<210> 1936

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 1936

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32

<210> 1937

<211> 159

<212> PRT

<213> Homo sapiens

<400> 1937

Arg	Cys	His	Ala	His	Gly	Pro	Ser	Cys	Leu	Val	Thr	Ala	Ile	Thr	Arg		
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Glu	Glu	Gly	Gly	Pro	Arg	Ser	Gly	Gly	Ala	Gln	Ala	Lys	Leu	Gly	Cys		
		20					25					30					
Cys	Trp	Gly	Tyr	Pro	Ser	Pro	Arg	Ser	Thr	Trp	Asn	Pro	Asp	Arg	Arg		
		35				40					45						
Phe	Trp	Thr	Pro	Gln	Thr	Gly	Pro	Gly	Glu	Gly	Arg	His	Glu	Arg	His		
	50				55				60								
Thr	Gln	Thr	Gln	Asn	His	Thr	Ala	Ser	Pro	Arg	Ser	Pro	Val	Met	Glu		

65					70					75				80	
Ser	Pro	Lys	Lys	Lys	Asn	Gln	Gln	Leu	Lys	Val	Gly	Ile	Leu	His	Leu
				85					90					95	
Gly	Ser	Arg	Gln	Lys	Lys	Ile	Arg	Ile	Gln	Leu	Arg	Ser	Gln	Cys	Ala
			100					105					110		
Thr	Trp	Lys	Val	Ile	Cys	Lys	Ser	Cys	Ile	Ser	Gln	Thr	Pro	Gly	Ile
		115					120					125			
Asn	Leu	Asp	Leu	Gly	Ser	Gly	Val	Lys	Val	Lys	Ile	Ile	Pro	Lys	Glu
	130					135					140				
Glu	His	Cys	Lys	Met	Pro	Glu	Ala	Gly	Glu	Glu	Gln	Pro	Gln	Val	
145					150					155					

<210> 1938

<211> 486

<212> DNA

<213> Homo sapiens

<400> 1938

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agaagcacct ggaaccccga cagaagattc tggactcccc agacgggacc aggagaggga 180
cggcatgagc gacacacaca aacacagaac cacacagcca gtcccaggag cccagtaatg 240
gagagcccca aaaagaagaa ccagcagctg aaagtcggga tcctacacct gggcagcaga 300
cagaagaaga tcaggatata gctgagatcc cagtgcgcga catggaaggt gatctgcaag 360
agctgcatca gtcaaaccac ggggataaat ctggatttgg gttccggcgt caaggtgaag 420
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taatga                                         486

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<210> 1939

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 1939

ctatgttgca tatatgcggt gccacgcc

28

<210> 1940

<211> 160

<212> PRT

<213> Homo sapiens

<400> 1940

Met	Arg	Cys	His	Ala	His	Gly	Pro	Ser	Cys	Leu	Val	Thr	Ala	Ile	Thr
1				5					10					15	
Arg	Glu	Glu	Gly	Gly	Pro	Arg	Ser	Gly	Gly	Ala	Gln	Ala	Lys	Leu	Gly
			20					25					30		
Cys	Cys	Trp	Gly	Tyr	Pro	Ser	Pro	Arg	Ser	Thr	Trp	Asn	Pro	Asp	Arg
		35					40					45			
Arg	Phe	Trp	Thr	Pro	Gln	Thr	Gly	Pro	Gly	Glu	Gly	Arg	His	Glu	Arg
50						55					60				

<210> 1944
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1944
 Ile Leu Ser Pro Leu Leu Arg His Gly Gly His Thr Gln Thr Gln Asn
 1 5 10 15
 His Thr Ala Ser
 20

<210> 1945
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1945
 Met Arg Cys His Ala His Gly Pro Ser Cys Leu Val Thr Ala Ile Thr
 1 5 10 15
 Arg Glu Glu Gly
 20

<210> 1946
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1946
 His Gly Pro Ser Cys Leu Val Thr Ala Ile Thr Arg Glu Glu Gly Gly
 1 5 10 15
 Pro Arg Ser Gly
 20

<210> 1947
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1947
 Leu Val Thr Ala Ile Thr Arg Glu Glu Gly Gly Pro Arg Ser Gly Gly
 1 5 10 15
 Ala Gln Ala Lys
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<210> 1948
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1948

Thr Arg Glu Glu Gly Gly Pro Arg Ser Gly Gly Ala Gln Ala Lys Leu
 1 5 10 15
 Gly Cys Cys Trp
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<210> 1949
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1949
 Gly Pro Arg Ser Gly Gly Ala Gln Ala Lys Leu Gly Cys Cys Trp Gly
 1 5 10 15
 Tyr Pro Ser Pro
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<210> 1950
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1950
 Gly Ala Gln Ala Lys Leu Gly Cys Cys Trp Gly Tyr Pro Ser Pro Arg
 1 5 10 15
 Ser Thr Trp Asn
 20

<210> 1951
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1951
 Leu Gly Cys Cys Trp Gly Tyr Pro Ser Pro Arg Ser Thr Trp Asn Pro
 1 5 10 15
 Asp Arg Arg Phe
 20

<210> 1952
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1952
 Gly Tyr Pro Ser Pro Arg Ser Thr Trp Asn Pro Asp Arg Arg Phe Trp
 1 5 10 15
 Thr Pro Gln Thr
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<210> 1953
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1953
 Arg Ser Thr Trp Asn Pro Asp Arg Arg Phe Trp Thr Pro Gln Thr Gly
 1 5 10 15
 Pro Gly Glu Gly
 20

<210> 1954
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1954
 Pro Asp Arg Arg Phe Trp Thr Pro Gln Thr Gly Pro Gly Glu Gly Arg
 1 5 10 15
 His Glu Arg His
 20

<210> 1955
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1955
 Trp Thr Pro Gln Thr Gly Pro Gly Glu Gly Arg His Glu Arg His Thr
 1 5 10 15
 Gln Thr Gln Asn
 20

<210> 1956
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1956
 Gly Pro Gly Glu Gly Arg His Glu Arg His Thr Gln Thr Gln Asn His
 1 5 10 15
 Thr Ala Ser Pro
 20

<210> 1957
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1957

Arg His Glu Arg His Thr Gln Thr Gln Asn His Thr Ala Ser Pro Arg
 1 5 10 15
 Ser Pro Val Met
 20

<210> 1958
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1958
 Thr Gln Thr Gln Asn His Thr Ala Ser Pro Arg Ser Pro Val Met Glu
 1 5 10 15
 Ser Pro Lys Lys
 20

<210> 1959
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1959
 His Thr Ala Ser Pro Arg Ser Pro Val Met Glu Ser Pro Lys Lys Lys
 1 5 10 15
 Asn Gln Gln Leu
 20

<210> 1960
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1960
 Arg Ser Pro Val Met Glu Ser Pro Lys Lys Lys Asn Gln Gln Leu Lys
 1 5 10 15
 Val Gly Ile Leu
 20

<210> 1961
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1961
 Glu Ser Pro Lys Lys Lys Asn Gln Gln Leu Lys Val Gly Ile Leu His
 1 5 10 15
 Leu Gly Ser Arg
 20

<210> 1962
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1962
 Lys Asn Gln Gln Leu Lys Val Gly Ile Leu His Leu Gly Ser Arg Gln
 1 5 10 15
 Lys Lys Ile Arg
 20

<210> 1963
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1963
 Lys Val Gly Ile Leu His Leu Gly Ser Arg Gln Lys Lys Ile Arg Ile
 1 5 10 15
 Gln Leu Arg Ser
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<210> 1964
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1964
 His Leu Gly Ser Arg Gln Lys Lys Ile Arg Ile Gln Leu Arg Ser Gln
 1 5 10 15
 Cys Ala Thr Trp
 20

<210> 1965
 <211> 21
 <212> PRT
 <213> Homo sapiens

<400> 1965
 Arg Gln Lys Lys Ile Arg Ile Gln Leu Arg Ser Gln Cys Ala Thr Trp
 1 5 10 15
 Lys Val Ile Cys Lys
 20

<210> 1966
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 1966

Ile Gln Leu Arg Ser Gln Cys Ala Thr Trp Lys Val Ile Cys Lys Ser
 1 5 10 15
 Cys Ile Ser Gln
 20

<210> 1967
 <211> 21
 <212> PRT
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<400> 1967
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